

Effectiveness of Highway Safety Public Education at  
Montana Motor Vehicle Division and Vehicle Registration  
Stations by Streaming a Variety of Safety Content

## **Task 2 Report**

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Prepared for the  
MONTANA DEPARTMENT OF TRANSPORTATION  
in cooperation with the  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

January 20, 2021

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### **Acknowledgments**

The WTI Team would like to thank the MDT Research Programs Manager Sue Sillick and our Research Project Manager Vaneza Callejas for their oversight. The WTI Team would also like to thank our Technical Panel, including: Gabe Priebe (Chair), Erin Root, Sky Schaefer (Department of Justice - DOJ), Doug McBroom, and Marcee Allen (Federal Highway Administration - FHWA) for their guidance and direction.

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## Acronym List

CHSP	Comprehensive Highway Safety Plan
CTO	County Treasurer Offices
DOJ	Department of Justice
DOT	Departments of Transportation
DUI	Driving Under the Influence
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
GB	Gigabyte
GHSA	Governor Highway Safety Administration
HD	High Definition
HDMI	High-Definition Multimedia Interface
IR	Infrared
LCD	Liquid Crystal Display
LCD TV	Liquid Crystal Display Television
LTAP	Local Technical Assistance Programs
Mbps	Megabits per second
MDT	Montana Department of Transportation
MVD	Motor Vehicle Division
NHTSA	National Highway Transportation Safety Administration
PC	Personal Computer
SOW	Scope of Work
TV	Television
UHD	Ultra-high definition
USB	Universal Serial Bus
V	volt
WTI	Western Transportation Institute

## Project Background

As state departments of transportation look to eliminate fatalities and serious injuries as a result of initiatives such as Toward Zero Deaths, it is important to utilize a 4E approach (engineering, emergency management services, enforcement, and education) to improve safety. Educating the public about safety initiatives helps to improve an area's safety culture. Traffic Safety Culture is defined as the shared beliefs (including values, assumptions, etc.) of a group that affect behaviors related to traffic safety. Traffic safety culture strategies such as public awareness campaigns and safety videos are important ways to educate the public and possibly change their beliefs and influence their behaviors. These strategies can be used to convey the need and benefits for safety countermeasures (e.g., roundabouts and rumble strips), as well as the consequences of risky behaviors (e.g., texting while driving, driving while impaired, distracted driving, driving unbuckled, etc.).

The Montana Department of Transportation (MDT) finds value in educating Montanans about traffic safety. Therefore, this project focuses on showing safety videos during wait times at Motor Vehicle Division driver license stations and County Treasurer Offices. The project will also encompass an evaluation to identify if the strategy shows a change in traffic safety culture.

The objectives of this project are as follows:

- Identify and secure available safety content (as opposed to creating new content) and purchase and deploy the appropriate equipment to display safety content;
- Survey the public to determine if they are paying attention to the videos shown at the Motor Vehicle Division (MVD) driver license stations and County Treasurer Offices (CTOs); and
- Determine if the safety messages have an impact on the behavior of the viewing public.

This report covers Task 2: Pre-Deployment Planning. This task included identification of equipment, finalizing the locations for deployment, securing video content, storyboard creation, and additional resource creation. More details for each subtask are provided in the chapters that follow.

## Identification of Equipment

This section describes the process used for equipment identification, information for each equipment option, and the final recommendation for purchase.

### Process for Equipment Identification

Prior to submitting the project proposal, the WTI Team researched many equipment options. For this discovery process, team members performed online research and approached various retailers of consumer electronics for advice and recommendations, as little to no information was found in literature searches, physical bookstores or online search engines. In total, the WTI Team identified seven possible equipment options.

During the proposal acceptance process, the Technical Panel approved the use of “off the shelf” consumer electronics for the project. After the project started, each of the seven systems was reconsidered in order to verify whether or not advances in technology or changes in pricing would influence the final system recommended in this task report. However, no significant changes were discovered.

Prior to making the final recommendation in this task report, the WTI Team set up two test systems (shown in Figure 1) in various configurations to determine potential challenges. While the final system will utilize new and up-to-date technology, the WTI Team determined that two test systems could be set up using older, on-hand (surplus) equipment combined with the purchase of two media players. The two systems in various configurations have been in continuous operation for four months and intermittent operation for over eight months. Having these systems in operation has also allowed the WTI Team to test the ability to display closed or open captions and consider production concerns for various videos. This has also enabled the team to confirm the device’s ability to continuously play media for long periods of time; to practice changing media; and to test reliability, usability, start up and shutdown time, and other functions.

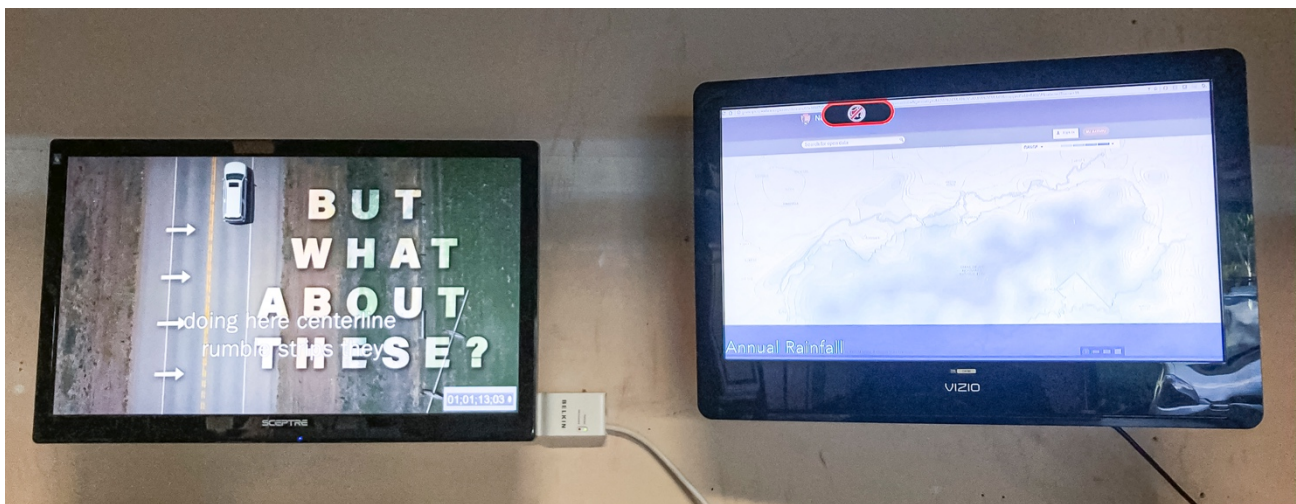


Figure 1: Two wall mounted test systems using surplus equipment and purchased media players.

Details on the seven systems can be found below.

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## Equipment Requirements

In identifying the seven options, the WTI Team used the following essential requirements for displaying videos in the Montana vehicle registration and licensing locations:

- Video display screen with minimum resolution of 1080 High Definition (HD) and 40-inch size.
- Sound (optional).
- Mechanism for playing predetermined and sequenced HD video content through a physically connected media source (i.e., not streamed wirelessly). Video content needs to continuously loop and display captions at all times.
- Ability to mount the system on a suitable wall for optimal viewing while providing access to the back of the screen to swap out media content and check the media player.
- Ability to physically secure the media player device and media storage to the system.

## Seven Equipment Options Considered

Seven systems were considered. Each system is described below with attention given to advantages or disadvantages as they relate to the system requirements and the system that was chosen.

1. **Digital Media Player and Smart Liquid Crystal Display (LCD) Television (TV).** The media player is connected to the TV using a High-Definition Multimedia Interface (HDMI) cable and powered directly through the TV (5 Volt (V) Universal Serial Bus (USB) power). It is secured inside a translucent thermostat lock box, which is securely attached to both the TV and a wall mounting bracket that utilizes “universal” wall mounting specifications. The video media is stored on an interchangeable USB 3 thumb drive with an 8 Gigabyte (GB) storage capacity. The system requires power from a single 110V standard wall outlet. The TV and media player are operated with separate remote controls. More detailed specifications and operation activities are described in later chapters. The primary advantages of this system are the relative simplicity of installation and operation, lower maintenance and lower cost. There are no significant disadvantages that have been determined at this point.
2. **Personal Computer (PC) Stick Combined with Smart LCD TV.** This system was suggested as an option by the WTI Team, as it is the one the Department of Justice (DOJ) is already operating in Helena, MT. A stick PC is a miniature (palm sized) fully functional PC that uses the Microsoft Operating System. While a viable option, the PC has functions beyond the scope of the project. Being a computer with an operating system, it is more complex to operate, requires more peripherals (keyboard and mouse) to interface with and a potential increased need for maintenance and software updates. Stick PCs are also more expensive to purchase and have a higher power consumption. The WTI Team viewed the working system of this type, which has been in operation in Helena for a number of years. While successful, the WTI Team, recommended utilizing the simpler and less expensive option described above (option #1). **Note:** The WTI Team discussed the pros/cons of the proposed system (option #1) versus the DOJ system (option #2) at the kick-off meeting on March 30, 2020. The Technical Panel preferred the system proposed by WTI Team because of the reasons described above, although primarily because it is simpler and has a lower cost. Since DOJ was not represented at this meeting, the WTI Team provided follow up

communication to indicate this decision and seek approval from DOJ. The only requirement that was reiterated was to ensure the physical security of the media player and media storage by locking it inside a lock box, attached to the backside of the TV/mounting bracket. The solution for this will be discussed as part of the complete system description below.

3. **All-in-one PC.** This type of system has the advantage of being relatively self-contained. However, there are similar disadvantages (as option #2) with regard to complexity of operating a PC, peripherals to interface and a higher price. Further disadvantages with regard to project specific requirements are the relatively limited screen size and the limited ability to mount on a wall.
4. **All-in-one Chrome PC.** These systems are similar to the all-in-one PC described above (option #3), other than this one operates on the Google Chrome operating system. While this one may be more affordable and simpler to operate than option #3, it is still relatively expensive and has limited screen size.
5. **Commercial Advertising/Information Systems.** While these systems are able to meet the requirements of the project, they have several features that make them more expensive or unsuitable for the project. Namely, these systems often require the ability to stream content from a centrally or locally managed server. They are also geared more for displaying editable content in a slide presentation format, as opposed to continuously looping video with captions.
6. **Stand-alone Smart LCD TV.** As technology advances, more features and functionality are added to smart TVs. As such it is possible with some smart TVs to simply plug in a USB storage device and play videos, looping continuously with or without captions. This makes for a “simple system”; however, it is not as simple to operate as implied and at this time the functionality is only available in more expensive TVs. It was determined that the added simplicity was not enough to off-set the higher price.
7. **LCD TV Connected to a Digital Media Streaming Device.** Digital media streaming devices such as Apple TV or Roku essentially make TVs smarter by providing functionality and wireless connectivity. While some can also serve the function of a non-streaming media player, this is not their primary purpose. The primary functions of these devices do not pertain to the requirements of the project, they do not provide any improved functionality or features over the proposed media player, and they are typically more expensive.

The WTI Team submitted the proposed system information to DOJ for review. It was approved via email on April 23, 2020. Once approved by DOJ, the WTI Team provided the feedback from DOJ to the Technical Panel during the meeting on May 27, 2020, during which the Technical Panel provided preliminary approval of the recommended system.

### **System Equipment/Component Selection Detail Recommendations**

The final system chosen (Option #1) will be “off the shelf,” consumer technology that does not require any custom development or interface. The wall mounted video display system is comprised of several components. These include: 1) an LCD flat screen “smart” TV, 2) a digital media player, 3) USB power cable, 4) HDMI cable, 5) digital media storage, 6) lockbox, and 7) wall mount.

At this time, it has been determined that sound will not be used. This means that the internal

speakers will be muted, and that there is no anticipation of purchasing additional speakers to mount underneath the TV.

The following sections describe in more detail each of the components.

### LCD Smart TV (TV)

With the continuous evolution of technology, the LCD TVs available today are more advanced than those available a year ago. While this is good to a point, not all of the advances are necessarily useful to this project. The most significant, relevant change is screen resolution. This will be discussed below in the fourth bullet. Some of the brands that were reviewed are Samsung, LG, and Vizio.

Considerations in selecting an appropriate smart TV include:

- *Screen size:* Although it may be determined that each location should have the same size TV, at this time it is estimated that the size range will be somewhere between 40" and 50", reflecting variations in room size and viewing distance at each installation site. If the TV is too small, it may not be noticed. Furthermore, the visuals/text could be hard to read. If the TV is too large, the visuals can be overwhelming, and could cause discomfort to viewers. In addition, the TV may not fit in an available space. Estimated viewing distances are described in the location description section.
- *Price:* While some retailers tend to push certain brands, with well-known names often being at the top of the price range, for the purposes of the project it is considered acceptable to choose a mid-price brand without significant compromises on build or picture quality. Nonetheless, availability and pricing can vary at different times. At the most recent price check at the Costco warehouse retailer, Samsung was the best option for the price, whereas normally it is one of the more expensive brands. The target price range is still in the \$250-\$300 range for a 43", 4K TV.
- *Lifespan:* Since the WTI team was unable to find consistent information relating to the lifespan of TVs or a comparison of various brands, the following is meant as background information. Currently LED TVs are engineered to last around six years. The biggest detriment to a TV under normal environmental conditions (room temperature, room brightness, relative humidity, limited dust, etc.) is the amount of time the screen is running and the brightness of the screen setting. These two factors impact the use of the backlight. It is the backlight that most commonly starts failing over time with a gradual loss in brightness, contrast and color range/quality. Other parts such as image processor or power controller are also susceptible to failure. There was not one brand consistently recommended over another, other than some instances where paying a premium price may lengthen the lifespan. No information gathered caused the WTI Team to prefer one particular brand over another within the range of reputable brands available at retail stores.
- *Resolution:* During preliminary discovery in proposing this project, 1080 HD TVs were more common and 4K TVs were available, but more expensive. Since that time, 4K has now become more common for TVs at or above 42". The price for this higher resolution has dropped to what is considered the "standard consumer price range." Several retailers now only carry a majority of 4K TVs with 1080 HD being relegated to online sales or smaller screen sizes. (It is cost prohibitive to squeeze 4K resolution into smaller consumer TVs). At this time, it is recommended that for screens at or around 40," the 4K resolution is preferred since this is becoming the current "mainstream" resolution. Even though the videos for this project will be

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only 1080HD resolution or less, they will display better on a 4K screen.


Additionally, it is good to have the higher resolution for possible future uses of the TVs if they remain on location after the project concludes. Another benefit to the 4K technology is the lifespan of the LEDs that make up the screen. The newer technology has a longer lifespan, which is good if the TVs will be played continuously every day during business hours.

- *HDMI and USB cable connection ports:* Currently these are the default interface connections for media/audio input and supplemental power. They are available on all TVs that were reviewed. HDMI will be used to transfer video content from the media player to the TV. A USB port will be used to provide power to the media player.
- *Color gamut and anti-reflectivity:* Knowing more about the locations where the TVs are likely to be mounted (based on images), the lighting conditions in the rooms fall within the normal parameters of TV viewing. That is to say, there does not seem to be a situation where the rooms have too much intense light or obscure viewing angles. As such, color range, contrast and glare should not be an issue.
- *Energy consumption:* Energy consumption is important considering the amount of time the TVs will be running. Generally, all smart TVs of reputable brands have Energy Star ratings and have similar efficiencies for the same size screen.
- *User interface:* A logical and user-friendly interface will assist in the ease of use and engagement of the staff that will be trained and tasked with operating the TVs. Most TVs meet ADA standards in providing accessible user interfaces with features such as high contrast, large text and audio menus.
- *Warranty/Extended Warranty:* The current understanding is that warranties for Smart TVs are rather similar. Inquiries were made about extended warranties, however, those that are readily available at retail locations are intended for personal/residential use only, not commercial or government use. One option available through Costco Wholesale is to use the “Costco Citi Visa card” to make the purchase. This automatically extends the warranty by two years. If the Technical Panel considers this as important, the WTI Team will investigate purchasing options further.

The final LCD TV recommendation is shown in Table 1.



Table 1: Recommendations for LCD TV

Recommendation #1	Samsung (UN43TU7 00D) 43" 4k UHD LED LCD TV
Price	\$280
Retailer	Retailer Costco Wholesale warehouse.
Image	 <p>Figure 2: 43" 4K Samsung TV on display at Costco warehouse.</p>
Recommendation #2	VIZIO - 43" V-Series 4k Ultra HD Smart LCD TV with HDR
Price	\$279.99
Retailer	Best Buy
Link	<a href="https://www.bestbuy.com/site/vizio-43-v-series-4k-ultra-hd-tv-smart-led-with-hdr/6411694.p?skuId=6411694">https://www.bestbuy.com/site/vizio-43-v-series-4k-ultra-hd-tv-smart-led-with-hdr/6411694.p?skuId=6411694</a>

Note #1: The term "Smart TV" alludes to the fact that the TV has capabilities for wireless internet connection via WIFI and built-in computer and apps that provide a range of functionality that, for the most part, are not necessary within the scope of the project. However, despite not using all of the functionality, there are no cost savings in looking for a TV with similar size and resolution that does not have the built-in smart features. They are essentially not available or more expensive.

Note #2: As a part of most conversations with TV sales personnel and installation experts, everyone indicated that the simplest solution would be to insert a USB thumb drive directly into the TV and play videos through the built-in functionality of the TV. While acknowledging this possibility, the response is that, based on the scope of the project, it is not certain that the TVs with a USB thumb drive can: 1) automatically play the videos, 2) provide closed captioning functionality, 3) loop the videos continuously and, 4) be effectively secured from theft. The WTI Team has proceeded with the understanding that securing the thumb drive from theft is a requirement.

### Digital Media Player

As described in option #1, this device is a "1080P Media Player." This simple device adds functionality to any display device with an HDMI input such as LCD TV, digital projector or

computer monitor. It will play a large variety of video formats, still images and music. The media input for the device can be provided through memory cards (like those used in digital cameras), USB thumb drives, or external hard drives with a USB connection.


The following features and specifications indicate the media player's suitability for the task.

- Low price: At the time of this writing the price is \$36 - \$40.
- Little to no maintenance.
- Low power usage. The device, requiring only 5V at 1A, can be powered by a 110V power adaptor (included with purchase) or, more conveniently, by a USB cable powered through a USB port on the LCD TV. The cable can be purchased separately at a cost of about \$3 each. Although an additional cost, use of this cable provides additional benefits.
- Ability to play continuously with relatively quick (less than 10 seconds) start up time.
- Simplicity of set up and operation. All operation is through an InfraRed remote control. This brings up one minor disadvantage: the secure lock box needs to be transparent to allow the remote control to transmit a signal to the media player. This has been solved and is described below.

Recent improvements have added control buttons to the player itself, although this is not necessarily a significant benefit for the purposes of this project. Very similar products are available that play 4K video resolution. These are more expensive (about \$65) and not considered necessary for the requirements of this project.

The final Digital Media Player recommendation is shown in Table 2.

Table 2: Recommendation for Digital Media Player

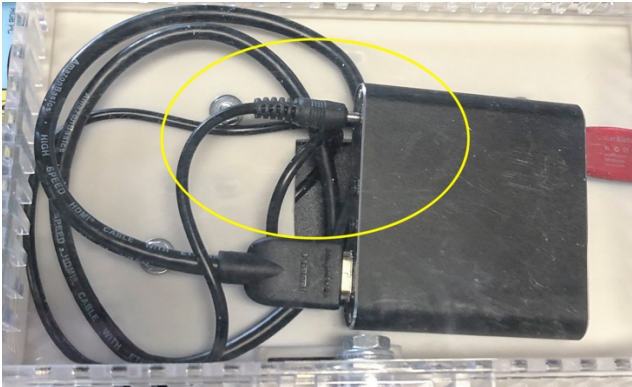
Recommendation	AGPtEK Mini 1080P Full HD Digital Media Player
Price	\$34
Retailer	Amazon
Link	<a href="https://www.amazon.com/dp/B00TOAAHG4/ref=cm_sw_em_r_mt_dp_U_whTgFbM78C8ZQ">https://www.amazon.com/dp/B00TOAAHG4/ref=cm_sw_em_r_mt_dp_U_whTgFbM78C8ZQ</a>
Image	 <p>Figure 3: Digital media player and remote control.</p>

### USB Power Cable

This cable can be used as an alternative to the provided adaptor. The two primary benefits are that it helps the system remain more compact (there is no need to use a separate power adaptor that would be plugged into a wall socket or power strip) and the power of the media player can be tied to the power of the TV. This will power up the media player when the TV is turned on. This results in the videos playing immediately without doing anything else. This has been successful on the two basic test systems that have been in operation. Occasionally the sound has come on, but that can be muted with either the remote from the TV or the media player.

The final USB Power Cable recommendation is shown in Table 3.

Table 3: Recommendation for USB power cable.

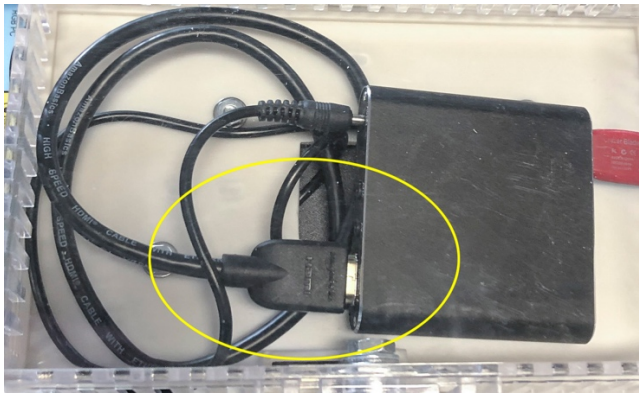
Recommendation	HUACAM HC06 3 Pack 3 feet USB to 3.5mm Barrel Jack 5V DC Cable Plug
Price	3 pack \$8.00, \$2.7 each
Retailer	Amazon
Link	<a href="https://www.amazon.com/dp/B015FOCEAO/ref=cm_sw_em_r_mt_dp_U_XSSgFbDGZ59C0">https://www.amazon.com/dp/B015FOCEAO/ref=cm_sw_em_r_mt_dp_U_XSSgFbDGZ59C0</a>
Image	 <p><i>Figure 4: USB to 3.5mm jack power cable providing power from the TV to the media player.</i></p>

#### HDMI Cable:

This cable provides the connection from the media player to the TV. It may not be necessary to purchase this separately as it is sometimes included with the purchase of the TV.

The final HDMI Cable recommendation is shown in Table 4.

Table 4: Recommendation for HDMI cable.

Recommendation	Maximm High-Speed HDMI 2.0 4K Braided Cable, 1.5 Feet, (5-Pack)
Price	5 pack \$20, \$4 each
Retailer	Amazon
Link	<a href="https://www.amazon.com/dp/B074HKRJ3B/ref=cm_sw_em_r_mt_dp_U_7PSgFbESYPV7T">https://www.amazon.com/dp/B074HKRJ3B/ref=cm_sw_em_r_mt_dp_U_7PSgFbESYPV7T</a>
Image	 <p>Figure 5: HDMI cable providing data connection between the digital media player and the TV.</p>

## Media Storage


Considerations in selecting an appropriate media storage device include:

- *Capacity:* Depending on the final length of the video sequence and possible additional videos, 4-8GB is sufficient. It is increasingly difficult to find thumb drives with less than 8GB and there is not a significant price benefit for the smaller capacity. 8GB drives can be purchased in 10 packs for a price saving.
- *Data Transfer rate:* 1080 HD video with audio (if needed), transfers at a rate of 22 megabits per second (Mbps) depending on the codec that the video is rendered/encoded with. The standard data transfer rate for a USB2 thumb drive is 480 Mbps. This is more than enough for the purposes of this project.
- *Durability:* These drives are solid state. Some have moving parts to protect the exposed connection point. For the purposes of the project, it is not anticipated that the thumb drives will be exposed to external environment, pockets, purses etc. So, protection is not a high priority.

The memory chip should be from a reputable manufacturer to ensure better quality due to continuous data transfer over a long period of time.

The final Media Storage recommendation is shown in Table 5.

Table 5: Recommendation for Media Storage

Recommendation	SanDisk 8GB Cruzer Blade USB 2.0 Flash Memory Drive.
Price	10 pack \$36.55,
Retailer	Amazon
Link	<a href="https://www.amazon.com/dp/B07D7WFK5/ref=cm_sw_em_r_mt_dp_U_5nTgFbECW7B5Q">https://www.amazon.com/dp/B07D7WFK5/ref=cm_sw_em_r_mt_dp_U_5nTgFbECW7B5Q</a>
Image	 <p>Figure 6: USB thumb drive connected to the digital media player.</p>


### Lockbox for Physical Security for Media Player and Media Storage (USB thumb drive)

The requirement is to securely attach a lockable, transparent box to the back of the TV at one or two of the wall mount fastening points. Additional considerations include:

- The box needs to be a relatively slim profile (less than 3”) in order to minimize the amount of space required between the wall and the back of the TV.
- The box is transparent in order to allow infrared (IR) remote control transmissions to the media player.
- One key is provided per box.

The recommended solution, shown in Table 6, is to use a wall mounted thermostat lock box with a back plate. This solution requires some basic modification to allow for passage of cables and attachment to the wall mount/TV.

Table 6: Recommendation for Lockbox.

Recommendation	BiSupply AC Thermostat Lock Box 8.5" x 2.9" x 5.6"
Price	\$14.99
Retailer	Amazon
Link	<a href="https://www.amazon.com/dp/B07MLH3P4S/ref=cm_sw_em_r_mt_dp_U_KQTgFbD0JA4MD">https://www.amazon.com/dp/B07MLH3P4S/ref=cm_sw_em_r_mt_dp_U_KQTgFbD0JA4MD</a>
Image	 <p>Figure 7: Recommended lockbox mounted to the back of an LCD TV using the TV wall mounting bracket.</p>

### Wall Mounting Bracket for TV


Various brands and styles are available. Functional durability, moderate price and range of movement were considered.

- *Load bearing:* Almost all types of wall mounts are rated for a range of TVs and associated weights. Selection will be made based on the size and weight of TV chosen.
- *Range of movement:* Some compact wall mounts have little or no range of movement. This limits the possible viewing angles and limits access to the back of the TV for checking cables etc., and in the case of this project limited space for positioning the lockbox. A mounting bracket with the ability to pull away from the wall and to move from side to side is recommended.

The final TV wall mount recommendation is shown in Table 7.



Table 7: Recommendation for TV Wall Mount.

Recommendation	SANUS Simplicity 22" - 55" Full-Motion TV Mount
Price	\$70
Retailer	Costco Warehouse
Link	<a href="https://www.costco.com/sanus-simplicity-22%22---55%22-full-motion-tv-mount.product.100399689.html">https://www.costco.com/sanus-simplicity-22%22---55%22-full-motion-tv-mount.product.100399689.html</a>
Image	 <p><i>Figure 8: Recommended wall mount in use, holding one of the test display systems.</i></p>

### Final System Recommendation

The final WTI Team recommendation for Technical Panel approval is shown in Table 8 (note this information is consolidated from the separate tables in the previous sections). The total cost for a system is around \$450. However, please note that these prices may fluctuate between the writing of this report and the purchase of the equipment later this fall.



Table 8: Summary of Recommendations for a Complete System

Component	Brand-Model	Retailer	Price
LCD Smart TV	Samsung (UN43TU7 00D) 43" 4k UHD LED LCD TV	Costco Wholesale Warehouse	\$279.99
Digital Media Player	AGPtEK 1080 HD Digital Media Player	Amazon	\$35.99
USB Power Cable	HUACAM USB to 3.5mm Barrel Jack 5V DC Cable	Amazon	3 pack \$8.00 \$2.7 each
HDMI Cable	Maximm High-Speed HDMI 2.0 4K Braided Cable	Amazon	5 pack \$20.00 \$4.00 each
Media Storage	SanDisk 8GB Cruzer Blade USB 2.0 Flash Memory Drive	Amazon	10 pack \$36.55 \$3.7 each
Lockbox	AC Thermostat Lock Box 8.5" x 2.9" x 5.6"	Amazon	\$14.99
Wall Mount Bracket	SANUS Simplicity 22" - 55" Full-Motion TV Mount	Costco	\$70
Hardware	Nuts to secure lockbox	Ace Hardware	\$1.00
Power cord/surge protector	NXT Technologies 6 Outlet Surge Protector 8' Cord 900 Joules NX54314	Staples Office Supplies	\$14.99
Estimated Shipping*		Amazon	\$20.00
		<b>Total for one system</b>	<b>\$447.36</b>

\*For test order 20200722, shipping was free. \$20 is an estimate.

## Deployment Location Finalization

This section describes, in detail, the process used for finalizing deployment locations, deployment considerations, deployment location options, and the final recommendation.

### Process for Deployment Location Finalization

As part of the scope of work (SOW) and subsequent budget creation, the WTI Team suggested a total of five locations for deployment, with two at MVD locations and three at CTO locations.

At one of the first Technical Panel meetings, the WTI Team provided the list of MVD and CTO locations within two hours of Bozeman to the Technical Panel for review. From here, the list was decreased further by DOJ staff, who assisted with contacting locations to see which would be willing to participate in the study.

Due to COVID-19, the ability to visit locations, as described in the SOW, was no longer an option. Therefore, the WTI Team put together an email (shown in Appendix A: Location Email) requesting all the necessary information to determine the suitability of the locations for the final recommendations list. Ultimately, to keep the project moving forward, three locations were visited in order to gather information.

The WTI Team used the information collected to inform the final five recommended locations.

### Deployment Considerations

In narrowing down locations, several considerations were taken into account including:

- *2-hours drive of Bozeman* – This is to facilitate trouble shooting of equipment by team members if necessary.
- *Duplication of locations* - The WTI Team also recommended to not duplicate locations (i.e., choose the same location for an MVD and CTO), but the DOJ thinks duplication is not a concern, as the typical Montanan visits MVD every 8 years whereas they renew license plates annually. However, the WTI Team still recommends not duplicating locations (e.g., Billings/Yellowstone County, Bozeman/Gallatin County, Kalispell/Flathead County, Helena/Lewis & Clark County, and Butte/Silver Bow County.)
- *Permanent driver license stations only* - To ensure the equipment can remain deployed after the pilot project is complete.
- *Visitation data to achieve statistically significant evaluation results* – To make the evaluation of this project a success, the evaluation results will need to be statistically significant. The only way to accomplish this is by ensuring that the visitation to the locations chosen is high enough. Visitation data should include who visits the County Treasurer's office, and why? (e.g., is there a bias as to typical ages or demographics of patrons), how many days the offices are open annually (particularly during the time periods we're proposing to survey), and average visitors per day which will vary by population (this can impact the amount of survey data that can be collected). Visitation statistics were not available to the WTI Team prior to the deadline for this task report. As an alternative, the professional experience and judgement of the DOJ representative was used.

- *Room layouts for the equipment* – It will be important to understand the available space, viewing distance, access to power and feasibility of securing the unit. It will also be necessary to understand space for the surveyors (Task 4) during unfavorable weather. This consideration is discussed in detail later in this chapter.
- *Tech panel suggestions/concerns* –The Technical Panel had concerns that limiting locations to within 2 hours of Bozeman may possibly miss some diversity across the state. The Technical Panel felt that while Montana is not very ethnically diverse, one element that should be captured is Montana’s Native American population. To accommodate this, it was decided that Billings should be chosen to cover some of the reservations in Northeast Montana. The WTI Team also recommended adding Kalispell as a location in the Northwest to cover some of the reservations (e.g., Confederated Salish and Kootenai Tribes -CKST) in that area. As of the writing of this task memo, WTI has a staff member that works remotely from Kalispell and another that is now based in the Billings area who are willing to assist with surveying in these areas.

### **Deployment Location Options**

Within the 2-hour radius, there are 24 potential locations. The project team recommends selecting two MVD (only 5 total candidate locations) and 3 total CTO (only 19 total candidates) locations.

The MVD Locations within 2 hours of Bozeman include:

1. Billings
2. Bozeman
3. Helena
4. Livingston
5. Butte

The County Treasurer Offices within 2 hours of Bozeman include:

1. Beaverhead (Dillon)
2. Broadwater (Townsend)
3. Carbon (Red Lodge)
4. Deer Lodge (Anaconda)
5. Flathead (Kalispell)
6. Gallatin (Bozeman)
7. Gallatin (Belgrade Satellite Office)
8. Golden Valley (Ryegate)
9. Jefferson (Boulder)
10. Lewis & Clark (Helena)
11. Madison (Virginia City)

- 
12. Meagher (White Sulphur Springs)
  13. Park (Livingston)
  14. Powell (Deer Lodge)
  15. Silver Bow (Butte)
  16. Stillwater (Columbus)
  17. Sweet Grass (Big Timber)
  18. Wheatland (Harlowton)
  19. Yellowstone (Billings)

Of those 24 potential locations, Carbon County declined the invitation to participate. Consent was received from the following locations to potentially participate:

- Motor Vehicle Departments (MVD): Billings, Bozeman, Helena, and Kalispell
- County Treasurer Offices (CTO): Broadwater (Townsend), Gallatin (Bozeman or Belgrade Satellite Office), Lewis & Clark (Helena), and Sweet Grass (Big Timber).

Utilizing the Belgrade CTO satellite instead of the Bozeman CTO would allow for high visitation but would remove the duplication of having both a CTO and MVD in Bozeman.

The room layout considerations will be the final filter applied to the locations in order to choose the final five.

### **Visitation Data**

Although visitation information was not available, the DOJ representative was able to provide the WTI Team with total number of registrations by CTO location and estimated that the in-person portion of this number is approximately 50 percent with the remainder being online or mail-in registrations. The WTI Team was then able to calculate an average weekly visitation number to use when comparing locations. This data is shown in Table 9.

Table 9: CTO Visitation Data

Type	Name	City	County	Total vehicle registrations completed in 2019 by county	50% in-person visits	Avg./month	Avg/week in a month
CTO	Broadwater County Treasurer Motor Vehicle Office	Townsend	Broadwater	8293	4147	346	86
CTO	Gallatin County Treasurer Motor Vehicle Office	Bozeman	Gallatin	120453	30113	2509	627
CTO	(Satellite) Gallatin County Treasurer Motor Vehicle Office	Belgrade	Gallatin	120453	30113	2509	627
CTO	Lewis & Clark County Treasurer Motor Vehicle Office	Helena	Lewis & Clark	76732	38366	3197	799
CTO	Sweet Grass County Treasurer Motor Vehicle Office	Big Timber	Sweet Grass	5232	2616	218	55
CTO	Park County Treasurer Motor Vehicle Office	Livingston	Park	21643	10822	902	225
CTO	Stillwater County Treasurer Motor Vehicle Office	Columbus	Stillwater	12019	6010	501	125
CTO	Yellowstone County Treasurer Motor Vehicle Office	Billings	Yellowstone	168324	84162	7014	1753
CTO	Carbon County Treasurer Motor Vehicle Office	Red Lodge	Carbon	15451	7726	644	161
CTO	Golden Valley County Treasurer Motor Vehicle Office	Ryegate	Golden Valley	1117	559	47	12
CTO	Wheatland County Treasurer Motor Vehicle Office	Harlowton	Wheatland	2430	1215	101	25
CTO	Meagher County Treasurer Motor Vehicle Office	White Sulphur	Meagher	2613	1307	109	27
CTO	Jefferson County Treasurer Motor Vehicle Office	Boulder	Jefferson	15460	7730	644	161
CTO	Silver Bow County Treasurer Motor Vehicle Office	Butte	Silver Bow	36669	18335	1528	382
CTO	Powell County Treasurer Motor Vehicle Office	Deer Lodge	Powell	7114	3557	296	74
CTO	Deer Lodge County Treasurer Motor Vehicle Office	Anaconda	Deer Lodge	11335	5668	472	118
CTO	Beaverhead County Treasurer Motor Vehicle Office	Dillon	Beaverhead	11072	5536	461	115
CTO	Madison County Treasurer Motor Vehicle Office	Virginia City	Madison	13595	6798	566	142
CTO	Flathead County Treasurer Motor Vehicle Office	Kalispell	Flathead	117751	58876	4906	1227

In Table 9, the yellow highlights indicate the final five CTO locations being considered and the orange highlights indicate that the weekly average is below 100. In order to get closer to statistically significant, the Broadwater and Sweet Grass CTOs should not move forward as options. (It should be noted that the Gallatin vehicle registrations were split 50-50 between Bozeman and Belgrade when calculating the 50% in person numbers).

For MVD locations, it was acknowledged that Bozeman, Helena, Butte, and Billings would all have consistently high visitation numbers. However, without documented visitation data and due to the possible changes in visitation due to COVID-19, the WTI Team cannot say with 100 percent certainty that we will be able to achieve statistical significance on the evaluation.

### Response to Location Inquiries

A detailed summary of the responses for each location can be found in Appendix B: Responses to Location Inquiries.

The location email was sent by Sky Schaeffer on behalf of the WTI research team. It was sent to Billings, Bozeman, and Kalispell MVD locations and Broadwater (Townsend), Gallatin (Bozeman), and Sweet Grass (Big Timber) CTO locations. The research team received responses from all but one of the locations (Sweet Grass County CTO, Big Timber).

From these responses, it could be determined that Bozeman, Kalispell and Billings DMV and Gallatin (Bozeman) CTO locations would be suitable. However, due to lack of space or suitable mounting location, it was determined that Broadwater (Townsend) would not be suitable.

After discussion in the July meeting, it was decided that the Sweet Grass (Big Timber) and Gallatin (Belgrade) CTOs be visited in person in order to assess their suitability. The Technical Panel was hopeful that Sweet Grass could be used to represent a more “rural” location. However, from the

visits to these locations, the WTI Team and Sky decided that the Gallatin satellite CTO would be suitable, but Sweet Grass CTO would not be suitable for reasons of low visitation numbers and no suitable location for the TV with access to power. With only one “rural” location chosen, this also would likely not have been a statistically significant difference.

Based on this decision, Sky offered to visit the Lewis & Clark CTO, assess it for its suitability and provide photos. After this visit it was decided that this would be a suitable location.

### **Final Location Recommendation**

The following locations were found to be acceptable for the suitable placement of the TV, have a higher visitation, and have a location available to perform surveys. As a caveat, the term “suitable placement of the TV” is subjective at this time given the necessary spacing of seating to accommodate social distancing requirements due to the COVID-19 pandemic.

The WTI Team’s final five locations recommendations for Technical Panel approval include:

- Motor Vehicle Departments (MVD): Billings, Bozeman, and Kalispell
- County Treasurer Offices (CTO): Gallatin (Belgrade Satellite Office) and Lewis & Clark (Helena).

## Securing Video Content

This subtask includes securing the video content that will be used in to create the video loops to be shown at the MVD and CTO locations. Please note that the WTI Team will not be creating new videos as part of this project. Securing new content will include obtaining the proper permissions for MDT to display this information.

### Process for Securing Video

The WTI Team first started this process by searching for existing transportation safety videos aimed at the public. This was done through internet and YouTube searches of transportation safety topics or by searching the websites of agencies known to have transportation safety videos. Some of the organizations include, but are not limited to:

- Federal Highway Administration (FHWA),
- Federal Motor Carrier Safety Administration (FMCSA),
- National Highway Transportation Safety Administration (NHTSA),
- Governor Highway Safety Administration (GHSA),
- Montana Highway Patrol,
- MDT's Safer Roads Website,
- Local Technical Assistance Programs (LTAPs),
- State Departments of Transportation (DOTs), and
- Traffic Safety Marketing.

The WTI Team also used their experience running the National Center for Rural Road Safety to suggest known content. For example, one video that was added to the list was the *Sweet Sound of Safety* video created by FHWA as part of the Every Day Counts 5 FoRRRwD initiative and another was a curve video created by Clackamas County in Oregon.

The MDT Research Manager then sent out an email (see Appendix C: Email to Other DOTs to Secure Video Content) from the WTI Team to all DOTs requesting any videos that meet the project's criteria. Specifically, the WTI Team was looking for videos on certain topics that were underrepresented. The WTI Team received responses from almost twenty DOTs amounting to an additional 50+ videos.

### Video Considerations

To identify candidate videos for the storyboard, the Team reviewed all of the identified videos with the following considerations in mind:

- The preferred format for videos is mp4 with H.264 encoding.
- Videos should have subtitles/captions or should be easily modified to have subtitles. The captions will be utilized both because no sound will be used and for ADA compliance (required for displaying videos as part of a state funded project in a state funded operation).

It is the WTI Team's understanding that "narrative captioning" is the compliance requirement. Relying on a particular TV's ability and audience interaction to activate and display closed captioning may lead to frustrations and inconsistencies in viewer experiences. As such, the current recommendation from the team is to "burn" the captions (i.e., captioning is included directly in the video so they cannot be turned off and would be difficult to update) into the video as "open captioning."

- Videos and captions needed to be available as downloadable files.
- Written permission for MDT to use an agency's video and captions will be needed.
- The priority for video use is (1) MT specific, (2) Generic, and (3) Another State's Videos
- The video clips should be short clips (generally less than 2 minutes and preferably less although slightly longer videos could be considered). The more short clip videos we have, the more content we can present in the loop.
- Videos could relate to upcoming safety awareness days/weeks/months and should consider which season to be displayed in (e.g., snowplows), but the priority is on the issues MDT is focused on addressing and not the season (e.g., belts, booze, and speed are top three issues).
- The video topics should line up with the priorities (e.g., emphasis areas) in MDT's Comprehensive Highway Safety Plan (CHSP) and Vision Zero plans; be a safety focus area for MDT, FHWA, or NHTSA; or be a DOJ priority which is to create better and more safe drivers and to be able to display their awareness campaigns.
- The safety measures in the chosen videos must be proven to be effective in MT. For example, MDT does not have Safety Edge, they have a modified version.
- The videos should have actionable items for the public. DOJ's priority is to create better and more safe drivers and to be able to display its awareness campaigns.
- As no sound will be used, there will be a need to watch all videos with sound off and closed captioning on to test the understanding of the concept presented in the video (as this is how we expect to have them viewed by the public). This will ensure that the video is not too wordy, or the announcer is not talking too fast, as this could make the video hard to watch and read without sound. We will also be looking to see if the videos still "pack the same punch" without the sound.

### **Video Topics**

The potential video topics were originally identified in the RFP. The WTI Team and the Technical panel identified additional topics in subsequent meetings. Potential safety topics include:

- Roundabouts,
- Flashing yellow arrows,
- Snowplows,
- Rumble Strips,
- Driving Under the Influence (DUI),



- 
- Seatbelt Use,
  - Myth Busters,
  - Winter Driving,
  - Emergency Vehicles – What to do when they are present and Move Over laws (DOJ Priority),
  - Work Zones – How to navigate them,
  - Traffic Incident Management,
  - School Buses,
  - Sharing the Road - Nonmotorized Users,
  - Motorcycles,
  - Speeding,
  - Distracted Driving,
  - Agricultural Equipment,
  - Real ID,
  - Maintenance videos,
  - Railroad crossings (although this may be a lower priority due to the occurrence of this type of crash being low),
  - Tribal transportation safety,
  - Child passenger safety,
  - Roadside clear zones, although an “engineering concept”, and
  - Overcorrection (rollovers are the number one crash type in MT, and it is an MDT priority).

The Team and Technical Panel had several discussions about including the Real ID videos in the final loop that will be used in the MVD and CTO locations. At first, the Technical Panel could not reach a consensus on this decision, but it seemed like a moot point when the equipment would be deployed in November 2020, because the Real ID deadline was October 2020. However, due to COVID 19, the Real ID deadline has now been moved to October 2021. Therefore, the Technical Panel discussed this issue again. The final consensus was that although the Real ID video is not transportation safety related (the goal of the project), it is a priority to DOJ. DOJ serves on the Technical Panel and is willing to deploy the equipment at its locations; therefore, one short (30 second) Real ID video will be added to the final video loop. The WTI Team will work with the Technical Panel in Task 4 to determine how this should be accounted for in the surveys and evaluation.

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**Final Recommendations**

All videos collected were entered into an excel sheet which will be provided separate from this Task Report, along with details relating to specific project criteria. This information will assist in the filtering process in the next subtask. In total, over 200 videos were identified from more than 60 different sources. The full list of videos will be provided in a separate Excel Database to the Technical Panel.

## Storyboard Creation

In Task 3, the WTI Team will create the “video mix” (defined as the entirety of the video content and still frames that will be displayed). In preparation for this, the Team created storyboard(s) for approval by the Technical Panel. The storyboards serve as an outline showing the proposed topics, media (video content, still frames), and their order.

### Storyboard Creation Process

The WTI Team utilized the excel sheet created in the previous subtask to filter the potential videos for use. The filters used included length (less than 2 min), audience type (priority for MT specific, then generic, then other states), sound needed (no), and caption readability (easy, too fast, or too wordy). It should be noted that a video was assumed to be generic if it either did not reference a particular state or if the only reference to that state was a closing or opening logo which could be removed if permission was received.

Of the 206 videos, 90 videos were suggested to be considered based on the filters of length, audience (i.e., either MT specific or generic), and sound. Note that a few of these videos were other state specific or would be better if used with sound, but the message was so powerful, they were kept on the consideration list. These videos are listed in audience type order in Appendix D: Filtered Safety Video Content.

From the remaining videos, the WTI Team then selected a mix of videos that line up with the priorities (e.g., emphasis areas) in MDT’s Comprehensive Highway Safety Plan (CHSP) and Vision Zero plans; are a safety focus area for MDT, FHWA, or NHTSA; or are a DOJ priority. The videos were then checked to ensure the safety measures in the chosen videos are proven safety countermeasures used and effective in Montana and have easily actionable items for the public.

The WTI Team then created four storyboards for MDT’s review. The storyboards provided a proposed mix of topical videos, as well as still frames.

### Storyboard Considerations

- *Video mix length* – In terms of length, the goal is for the video mix to be short enough that a viewer can watch it in its entirety while waiting, but long enough for a viewer to see a variety of safety topics. The Technical Panel has preliminarily agreed to a ten-minute video loop. With the assumption of a 10-minute loop, the video mix could only be 5, 2-minute videos, unless shorter videos are used. There is also the need to leave time to display some static information between videos as well. Depending on a viewer’s wait time and the overall length of video mix, there is a chance that a viewer would not view the entire content loop. There is also a high probability that a viewer will not start the loop at the very beginning. All these factors will need to be considered when creating the mix (e.g., determining the length, when to add stills, and when to brand with the MDT logo).
- *Number of video mixes* - For ease of surveying and to keep costs reasonable, the WTI Team recommends there be no more than two separate video mixes created and used throughout the project life. Two video mixes (rather than one) would allow for more video content to be shown and to possibly accommodate seasonal changes. The Technical Panel recommends that the two video mixes not be completely different, but rather provide some overlap. It is intended for Mix #1 to be displayed from November to April and Mix #2 to be displayed from May to October.

- *Still frames* – The WTI Team proposed that still frames also be used in the video mix similar to the current DOJ video loop, which includes trivia questions (see Figure 9) and “did you know” questions (see Figure 10). The Technical Panel agreed that this was a good idea and would possibly draw people in, separate the videos, and assist with determining whether people are paying attention (i.e., questions). They also suggested it would be important for the topics to be transportation safety related and the WTI Team should be careful to not choose questions that may need to be updated frequently over time.
- *Seasonal video* – The WTI Team and Technical Panel discussed the use of seasonal videos. Considerations included that because license and registration renewals are not done frequently, a viewer may only come for renewal in summer, but a winter video could be educational to them. Other members questioned whether seeing a winter video in summer would change the behavior all those months later. The discussion also included possibly having a base of non-seasonal videos in the mix and then adding a few seasonal ones into each of the two mixes that will be used. It was also noted that safety videos aimed at motorcycle riders (e.g., helmets) would be of more use during motorcycle testing which only occurs in the spring/summer and sometimes fall at the permanent locations.
- *Local population* – While it will not be done for this pilot project, it was recommended by the Technical Panel that in the future, the video mixes could be tailored to the location’s population. For example, the mixes could use Tribal specific information in some locations or tailor a countermeasure to a particular area (e.g., roundabouts).

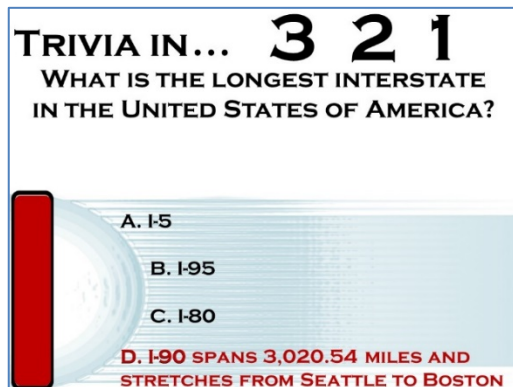


Figure 9: Trivia Slide Example from MVD PPT



Figure 10: Did You Know Example from MVD PPT

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### **Final Recommendations**

Four storyboards were created for Technical Panel consideration. They each include a mix of pictures, videos, infographics, trivia, and did you know questions. Each storyboard contains at least one reference to the priority CHSP topics (i.e., occupant protection, impaired driving, and roadway departure), as well as, a mix of other important transportation safety topics (e.g., rail, active transportation, share the road, slow moving vehicles, school bus safety, commercial vehicles safety, etc.). It should be noted that after Technical Panel review and final decision, there may be a need to replace some of the chosen photos to match the storyboard content and additional work can be done to the aesthetics of the trivia, infographics, and did you know slides.

The four storyboards range in length from 10 minutes 05 seconds to 10 minutes 48 seconds. It should be noted that this length is an estimate and may be slightly shorter or longer once it is created as a loop and tested for readability. In the end, the Technical Panel will choose two storyboards to be deployed; therefore, pieces from these 4 storyboards can be mixed and matched if chosen by the Technical Panel.

Storyboard #1 is 10 minutes 48 seconds in total estimated length and more detail can be seen in Table 10. Storyboard #2 is 10 minutes 42 seconds in total estimated length and more detail can be seen in Table 11. Storyboard #3 is 10 minutes 05 seconds in total estimated length and more detail can be seen in Table 12. Storyboard #4 is 10 minutes 23 seconds in total estimated length and more detail can be seen in Table 13.

The four originally proposed storyboards for the Technical Panel's review and approval are shown in Appendix E: Storyboard Drafts. Changes requested by the panel to the two chosen will be documented in subsequent Task Reports.

Table 10: Storyboard #1 Details

Type	Description	CHSP Category	Timing	Notes
Picture	Generic Montana	NA	10 sec	
Video	Just 1 Reason (MDT)	Occupant Protection	31 sec	
Infographic	Just 1 Reason (MDT)	Occupant Protection	25 sec	
Video	Work Zone Safety is Your Responsibility Too (National Asphalt Pavement Assoc)	Other: Work Zone	111 sec	
Picture	Work Zone	Other: Work Zone	10 sec	We are using this trivia question as part of Rural Road Safety Awareness Week on Sept 28-Oct 2 and could make this graphic look similar after.
Video	What is a Roundabout (MDT)	Other: Intersection Safety	63 sec	
Trivia	Roundabouts	Other: Intersection Safety	25 sec	
Video	MT Real ID	Other: Real ID	31 sec	
Picture	Generic Rural Montana	Other	10 sec	
Video	Sober Friend (MDT)	Impaired Driving	31 sec	
Infographic	DUI	Impaired Driving	25 sec	This is a portion of MDT's brochure. If you choose this infographic, then we will ask for the original artwork so we can use this information but make it better fit the slide.
Video	Tips for Safe Winter Driving (AAA)	Other: Winter	101 sec	
Picture	Snow in Montana	Other: Winter	10 sec	
Video	Rumble Strips – Sweet Sound of Safety (FHWA)	Roadway Departure	73 sec	
Trivia	Rumble Strips	Roadway Departure	25 sec	This trivia question is part of Rural Road Safety Awareness Week on Sept 28-Oct 2 and could make this graphic look similar after.
Video	Motorcycle Safety (Colorado DOT)	Other: Motorcycles	31 sec	
Picture	Motorcycle	Other: Motorcycles	10 sec	Need to locate a picture
Video	Cycling Safety is Everyone's Responsibility	Other: Active Transportation/Share the Road	16 sec	
Vision Zero Logo		NA	10 sec	

Table 11: Storyboard #2 Details

Type	Description	CHSP Category	Timing	Notes
Picture	Generic Montana	Other	10 sec	
Video	Embrace Life – Always Wear Your Seatbelt (Sussex Safer Roads)	Occupant Protection	89 sec	
Infographic	We Care Buckle Up	Occupant Protection	25 sec	
Video	Snow Rumble (MDT)	Roadway Departure	31 sec	
Trivia	Roadway Departure	Roadway Departure	25 sec	
Video	Motorists in Roundabouts (MDT)	Other: Intersection Safety	71 sec	
Infographic	Roundabout	Other: Intersection Safety	25 sec	
Video	School Bus Safety PSA Video 1 (Child Safety Network)	Other: School Bus	31 sec	
Infographic	School Bus Travel (American School Bus Council)	Other: School Bus	25 sec	
Video	Emoji 30 (NHTSA)	Other: Distracted Driving	31 sec	
Trivia	Distracted Driving	Other: Distracted Driving	25 sec	
Video	MT Real ID Airport (MT DOJ)	Other: Real ID	31 sec	
Picture	Generic Montana	Other	10 sec	
Video	I'm Not Driving – DUI (WA Traffic Safety Commission)	Impaired Driving	31 sec	
Infographic	High Visibility Enforcement	Impaired Driving	25 sec	
Video	Truck Smart: Avoiding Blind Spots (Zero Fatalities)	Other: Commercial Vehicles	41 sec	
Picture	Commercial Vehicles	Other: Commercial Vehicles	10 sec	
Video	Share the Road (Michigan DOT)	Other: Active Transportation/Share the Road	30 sec	
Infographic	Share the Road	Other: Active Transportation/Share the Road	25 sec	
Trivia	Roadway Departure	Roadway Departure	25 sec	
Video	Judging a Motorcycle's Distance (NHTSA)	Other: Motorcycle	16 sec	
Vision Zero Logo		NA	10 sec	

Table 12: Storyboard #3 Details

Type	Description	CHSP Category	Timing	Notes
Picture	Commercial Vehicle	Other: Commercial Vehicle	10 sec	
Video	What Kind of Driver are you Raising (Transport Accident Commission Victoria)	Occupant Protection	61 sec	
Picture	Generic Montana	Other	10 sec	
Video	Our Family Protecting Yours (Iowa DOT)	Other: Winter	31 sec	
Infographic	Winter Driving Checklist	Other: Winter	25 sec	
Video	Buckle Up What You Love – Click It or Ticker (NHTSA)	Occupant Protection	31 sec	
Infographic	Why Buckle Up?	Occupant Protection	25 sec	
Video	Stay Safe in Nighttime Work Zones (MDT)	Other: Work Zones	66 sec	
Trivia	Work Zones	Other: Work Zones	25 sec	
Video	Eye Contact Saves Lives (Colorado DOT)	Other: Active Transportation/Share the Road	16 sec	
Picture	Bicyclist	Other: Active Transportation/Share the Road	10 sec	
Video	Feel Different (NHTSA)	Impaired Driving	31 sec	
Infographic	I Prioritize Road Safety By...	Other: Safety Culture	25 sec	This will be used during Rural Road Safety Awareness Week (RRSAW) on Sept 28-Oct 2. It can be filled in after.
Video	Flashing Yellow Light (MDT)	Other: Intersection Safety	61 sec	
Trivia	Flashing yellow turn arrow	Other: Intersection Safety	25 sec	
Video	MT Real ID Airport (MT DOJ)	Other: Real ID	31 sec	
Picture	Animals of Road	Other: Animals on Road	10 sec	
Video	Safe Around Semis (Iowa DOT)	Other: Commercial Vehicles	77 sec	
Infographic	Blind Spots	Other: Commercial Vehicles	25 sec	
Vision Zero Logo		NA	10 sec	



Table 13: Storyboard #4 Details

Type	Description	CHSP Category	Timing	Notes
Picture	Agriculture	Other: Slow Moving Vehicle	10 sec	
Video	There's No One Someone Won't Miss (Transport Accident Commission Victoria)	Other: Safety Culture	61 sec	
Infographic	Zero	Other: Safety Culture	25 sec	This will be used at RRS AW and can be updated after the fact (i.e., remove hashtags)
Video	Together We Can End Impaired Driving (Foundation for Advancing Alcohol Responsibility)	Impaired Driving	62 sec	
Did You Know?	Impaired Driver Statistics	Impaired Driving	25 sec	
Video	The Right Seat – If You Love Them Enough – Play Place (NHTSA)	Occupant Protection	31 sec	
Trivia	Booster Seats	Occupant Protection	25 sec	
Video	MT Real ID Airport (MT DOJ)	Other: Real ID	31 sec	
Picture	Montana Generic	Other	10 sec	
Video	Slow Down for the Curve (Clackamas County)	Roadway Departure	49 sec	
Trivia	Roadway Departure	Roadway Departure	25 sec	
Video	Slow Down, Move Over (NY State DMV)	Other: Move Over Law	33 sec	
Did You Know	Move Over Law	Other: Move Over Law	25 sec	
Video	Be Seen – Pedestrian Safety	Other: Active Transportation/Share the Road	115 sec	
Picture	Montana Generic	Other	10 sec	
Video	Use Caution Around Slow-Moving Vehicles (Iowa DOT)	Other: Slow Moving Vehicles	31 sec	
Did You Know	Slow Moving Vehicles	Other: Slow Moving Vehicles	25 sec	
Video	Railroad Safety – Rural Signs (Colorado DOT)	Other: Rail Safety	20 sec	
Vision Zero Logo		NA	10 sec	

## **Additional Resource Creation**

As part of the SOW, the WTI Team suggested providing additional information outside of the video content at the MVD and CTO locations. The idea for these additional resources came from the WTI Team's research on potential TV stands and finding ones that included a brochure holder. Additional information options could include rack cards, a QR code on a poster, or adding information to the MVD/CTO emails or website.

There is a potential for this information to provide a more robust educational campaign, by providing viewers with additional information on the project, links to the videos they saw so they can share them with others, more information about topics they viewed in the videos, or additional safety information to fill in the gaps left by the videos.

While additional information could have also allowed for measurement of subsequent actions taken due to the videos (e.g., a survey question asking if viewers took this information and what they did with it), it also could have affected the video evaluation and budget. Therefore, while this was recommended, it was determined that a further discussion on this topic with the Technical Panel would occur prior to the Interim Meeting.

The discussion with the Technical Panel occurred during the bi-monthly meeting held on May 27, 2020. The WTI Team acknowledged that due to the requirement that the technology now be wall mounted, the additional resources may no longer be necessary. If it was decided that additional resources should be provided, it was also acknowledged that they did not all have to be newly created, but existing MDT safety resources could be considered.

The Technical Panel felt that additional resources on the priority safety topics could be useful to either complement the videos or fill in the gaps. However, Panel members suggested that before new materials were created, the storyboards should be finalized first; existing MDT resources should be identified; and the MVD and CTO offices need to agree to having brochures in their offices.

Following the May meeting, members of the Technical Panel reached out to MVD and CTO offices who were not in favor of having brochures. Therefore, this subject will not be discussed further, and no additional resources will be created.

## Appendix A: Location Email

Thank you for agreeing to be a pilot site for our safe driving TV pilot. Below is information about the pilot and some questions we're looking for you to help answer. We're also looking for some information and photos of your location.

Thanks,

Sky

To Whom It May Concern,

As you know, as part of the MDT funded research project "Effectiveness of Highway Safety Public Education at Montana Motor Vehicle Division and Vehicle Registration Stations by Streaming a Variety of Safety Content," your location has been chosen as one of the five pilot locations to have an LCD TV (Flat screen/Smart TV) installed at your licensing/registration facility.

In light of COVID-19 and the current restrictions for in-person visits and understanding that each facility is unique in its size and layout, we are asking that you provide the research team and Technical Panel with information and images that will help determine the most suitable location for the LCD TV.

Regarding the location of the LCD TV, the three main considerations are to:

- provide the highest visibility to visitors,
- be mounted on a wall, and
- have safe access to AC power.

To accommodate this are several considerations including:

- The wall would need to have space for a minimum of a 36" LCD TV.
- The viewing height needs to be optimal for viewing at various distances, assuming several rows of seats.
- The screen size would be determined by size of room and viewing distance.
- The wall material should allow for safe and secure mounting of the LCD TV.
- Safe access to power outlet. i.e., not running power cables across a floor, with foot traffic.

Mounting method and power cord management and standards will be coordinated with the research team and Sky Schaefer.

At this time, the intention is that sound will not be played, and the videos will be captioned; however, the use of sound may be considered in the future.

With the above in mind, we kindly ask that you provide the following details and images to help us in this process.

---

**Details**

How many entrances are there?

Is there an entrance lobby? If so, would this area be suitable for a person to conduct exit surveys? Where can the survey person stand or sit?

Is there one waiting area, or multiple areas?

If more than one, is there an obvious preference for which area be used based on the number of seats, the seating arrangement/direction and the availability of a suitable wall?

If one area is obviously preferable, please provide details of that area and why? If either area is a possibility, please provide details for both.

What is the number of seats in the waiting area? What is the number of seats oriented toward the wall most likely to have the TV mounted?

What is the approximate distance of the rear seats to the potential viewing wall?

What is the approximate distance to the front seats to the potential viewing wall?

**Photos**

Interior of entrance lobby – this will enable the research team to determine if usable by the person giving the surveys.

Immediately inside the main entrance – to provide context of the licensing or registration facility as a whole. Approximately three images one facing left, one forward and one facing right. Please provide more if it helps understand the general layout of the facility.

Visitor sitting area - four images from the center looking outward in each direction.

Visitor sitting area - images one from each wall facing towards the center.

Visitor sitting area - facing the wall most likely for the LCD TV mounting from or behind the rearmost seats.

Visitor sitting area - facing the wall most likely for the LCD TV mounting from the front seats.

Thank you for your assistance! We look forward to working with you on this project. If you have any questions, please feel free to reach out to Neil Hetherington at [hetherington@montana.edu](mailto:hetherington@montana.edu) or 406-994-3566.

Neil Hetherington and Jaime Sullivan

WTI Research Team

## Appendix B: Responses to Location Inquiries

Table 14: Responses from Billings MVD

Question	Response
Number of entrances?	1
Entrance lobby suitable for conducting exit surveys?	Billings would be able to accommodate a spot, maybe not right in front of the entrance.
Number of waiting areas?	There are currently 2 waiting areas
Preference if more than one?	Replacement and renewal entrance would be preferable.
Why preferable?	The space is larger and accommodates more people.
Number or seats oriented towards TV?	Approximately 20 seats. We could position so all seats can view the TV.
Approximate viewing distance from rear of waiting area?	Approximately 40 feet.
Approximate viewing distance from front of waiting area?	Approximately 15'



Figure 11: Entrance lobby for Billings, MT DMV office.



Figure 12: Suitable wall for mounting the TV at the Billings DMV office. Customers would sit perpendicular to the counter which is to the right of this image.

Table 15: Responses from Bozeman DMV

Question	Response
Number of entrances?	We have 2 entrances.
Entrance lobby suitable for conducting exit surveys?	Yes, we do have an entrance to the lobby as depicted in the photos. Yes, we do have space avail to conduct exit surveys.
Number of waiting areas?	1 is for appts the 2 <sup>nd</sup> is for walk in customers.
Preference if more than one?	The waiting area for appts is preferable as it has the wall space and outlet.
Why preferable?	
Number or seats oriented towards TV?	We have approx. 14 seats per waiting area.
Approximate viewing distance from rear of waiting area?	There is approx. 14ft from the last row of chairs to the wall where the TV would be.
Approximate viewing distance from front of waiting area?	Approximately 6ft from the 1 <sup>st</sup> row of chairs to the wall.



Figure 13: Entrance lobby to Bozeman, MT DMV office.



Figure 14: Waiting area with suitable wall for mounting the TV



Table 16: Responses from Kalispell MVD

Question	Response
Number of entrances?	1
Entrance lobby suitable for conducting exit surveys?	They have multiple locations to sit or stand in our waiting area.
Number of waiting areas?	One main waiting area
Preference if more than one?	n/a
Why preferable?	n/a
Number or seats oriented towards TV?	25 Seats all facing TV area
Approximate viewing distance from rear of waiting area?	22 FT
Approximate viewing distance from front of waiting area?	10FT



Figure 15: Entrance area for Kalispell, MT DMV office.

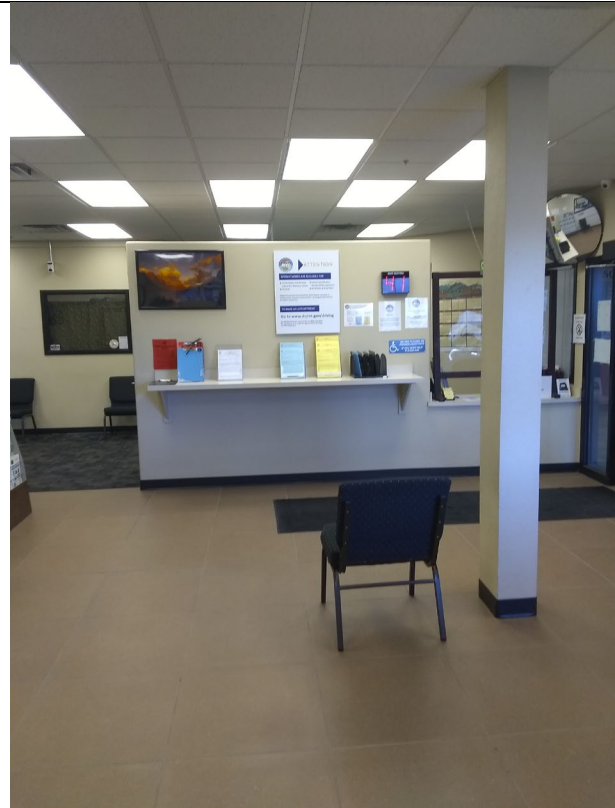


Figure 16: Suitable wall for mounting the TV.

Table 17: Responses from Broadwater CTO (Townsend)

Question	Response
Initial comment from respondent.	“Sky; I have enclosed some pictures of our lobby. There really isn’t any seating area to speak of, other than the bench that sits in front of our office. We have a long hallway and a short distance between our front door and the windows into our motor vehicle office.”
Number of entrances?	We have 3 entrances.
Entrance lobby suitable for conducting exit surveys?	No
Number of waiting areas?	One waiting area.
Preference if more than one?	There is a bench in a very confined area.
Why preferable?	n/a
Number or seats oriented towards TV?	One bench
Approximate viewing distance from rear of waiting area?	5 feet
Approximate viewing distance from front of waiting area?	5 feet

It seems that the Broadwater CTO may not be a suitable location based on the number of entrances, restricted seating area and limited space to mount a TV.



Figure 17: Entrance lobby to Broadwater County CTO, Townsend, MT



Figure 18: Waiting area in Broadwater County CTO. Limited seating with only one bench and limited viewing area, across a five-foot corridor.



Table 18: Gallatin CTO (Bozeman)



Question	Response
Number of entrances?	2
Entrance lobby suitable for conducting exit surveys?	Yes – In the lobby
Number of waiting areas?	2
Preference if more than one?	See below
Why preferable?	We would actually like to put it in the office behind the three primary desks. We don't generally have a long wait time, and most of the time our customers are staring at their phones when they are waiting. Putting it on the wall we're suggesting will actually give the customer something to watch rather than staring at the tops of our clerks' heads. J
Number or seats oriented towards TV?	During busy times, we process approximately 150 titles a day. The number of seats and space accommodates around 40.
Approximate viewing distance from rear of waiting area?	The span from the customer at the desk to the tv would range from 7 to 10 feet.
Approximate viewing distance from front of waiting area?	n/a
	

Figure 19: Wall suggested for mounting the TV located behind the registration counter.

Figure 20: The location of the TV would be visible from the three primary registration desks. Note the Covid-19 license plate)

While there were no images provided for either of the two entrance lobbies, the WTI Team is aware that one entrance is from the sidewalk on Main Street, and the other enters from a side street that has closer access to parking. By observation, it seems that the second is the more frequently used entrance.

In order to expedite the decision process, a WTI team member visited two locations and Sky Shaeffer (DOJ) visited one location. The following is the information gathered from those visits.

Table 19: Gallatin CTO #2 (Belgrade) – in person visit



Question	Response
Number of entrances?	2 - only one is being used
Entrance lobby suitable for conducting exit surveys?	No lobby, but space is available in close proximity to the entrance.
Number of waiting areas?	1
Preference if more than one?	
Why preferable?	
Number of seats oriented towards TV?	5-8
Approximate viewing distance from rear of waiting area?	25 feet
Approximate viewing distance from front of waiting area?	7 feet
 <p>Figure 21: Entrance area with no lobby. Currently, with warm temperatures, there is seating available outside, and no one is waiting inside.</p>	
 <p>Figure 22: The location of the TV (two options shown) would be visible from the counter position on the left, and from the waiting room chairs. The view of the TV would be at an angle, not direct.</p>	

Table 20: Lewis and Clark CTO (Helena) – in person visit





Question	Response
Number of entrances?	
Entrance lobby suitable for conducting exit surveys?	Yes
Number of waiting areas?	1
Preference if more than one?	
Why preferable?	
Number of seats oriented towards TV?	5-8
Approximate viewing distance from rear of waiting area?	15 feet
Approximate viewing distance from front of waiting area?	5 feet
 <p>Figure 23: The TV would be mounted behind some of the customers in the waiting area. This is determined to be OK by Sky.</p>	
 <p>Figure 24: We think people who are in line can watch it (if it's angled, possibly), people waiting on the bench, at the counter can turn around....we could potentially ask if they'd be willing to show some of the videos on their TV too. (Comment from Sky Schaeffer)</p>	

Table 21: Sweet Grass County CTO, Big Timber - in person visit.

Question	Response
Number of entrances?	1
Entrance lobby suitable for conducting exit surveys?	Yes
Number of waiting areas?	3 – Two hallway standing areas + 1 seated area
Preference if more than one?	Yes
Why preferable?	Most feasible location is in the registration desk area. But does not have reasonable access to power.
Number of seats oriented towards TV?	0
Approximate viewing distance from rear of waiting area?	15 feet
Approximate viewing distance from front of waiting area?	10 feet
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Figure 25: Standing waiting area #1 entrance hallway. Only feasible location for TV in upper right corner, but with no easy access to power.</p> </div> <div style="text-align: center;">  <p>Figure 26: Standing waiting area #2 + seated waiting area. Less used than area #1. Feasible TV mounting areas offer limited viewing options for anyone waiting in line or in the seated area. The corner mounting area indicated in Figure 25 is visible only from the first waiting position.</p> </div> </div>	

## Appendix C: Email to Other DOTs to Secure Video Content

Greetings,

The Montana Department of Transportation (MDT) is undertaking a new research project to evaluate the use of road safety videos at motor vehicle registry and licensing offices to change driver behavior. While our contractor is identifying videos that meet the project criteria, MDT wanted to reach out to our peers to see if you have any videos that should be considered for use. **If so, please send them as indicated below by 5/1/20.**

The project criteria for videos includes:

- 2 minutes or shorter (although slightly longer videos could be considered),
- Captions provided,
- Meant for a generic audience and not specific to your state,
- Your willingness to provide written permission for MDT to use your video and captions, and
- Your ability to send the video and captions as downloadable files.

The video topics/themes MDT is most in need of include:

- Roadway Departure (including overcorrection and rollovers)
- Intersection Crashes
- Impaired Driving
- Occupant Protection (including child safety seats)
- Tribal specific
- Speeding
- Traffic Incident Management
- Other topics/themes MDT is collecting include:
  - Winter Driving
  - Agricultural Equipment
  - Emergency Vehicles
  - Sharing the Road
  - School Buses
  - Work Zones
  - Motorcycles

If you have any of the above topical videos you are willing to share, please send them, along with captions and written permission for use to our contractor Jaime Sullivan at [jaime.sullivan2@montana.edu](mailto:jaime.sullivan2@montana.edu). If you have any questions, you can also contact her via email (above) or phone at 774-571-3503.

Thank you so much for your consideration!

Best,

*Sue*



## Appendix D: Filtered Safety Video Content

Video Title	Storyboard #	Link	Source	Length	What is discussed?	Notes	Audience	Topic Category
Cycling Safety Is Everyone's Responsibility	1	<a href="https://www.youtube.com/watch?v=K0MIKFAu8">https://www.youtube.com/watch?v=K0MIKFAu8</a>	AAA	0:15	Cycling safety is responsibility of biker and driver.		Generic	Sharing the Road - Nonmotorized Users
Tips for Safe Winter Driving	1	<a href="https://www.youtube.com/watch?v=m5LkTtW3TDY">https://www.youtube.com/watch?v=m5LkTtW3TDY</a>	AAA	1:40	All the good safety tips for driving in the winter.	Captions need work before using without sound.	Generic	Winter Driving
2019 CDOT Motorcycle Safety - Drivers	1	<a href="https://www.youtube.com/watch?v=iXFs_DSHbQ">https://www.youtube.com/watch?v=iXFs_DSHbQ</a>	Colorado DOT	0:30	Gives tips to drivers on how to be safe around motorcycles so to not add to the amount of motorcycle fatalities there are annually	great video with lots of tips. Logo at end.	Generic	Motorcycles
Rumble Strips: The Sweet Sound of Safety	1	<a href="https://www.youtube.com/watch?v=2V5-M4-Q7DF&amp;feature=youtu.be&amp;fbclid=IwAR1XV6E6bD6t6H8zBFxQFWK8BQ3mHA9I6amnCwdkvo2sUj4tRD8a3HQ">https://www.youtube.com/watch?v=2V5-M4-Q7DF&amp;feature=youtu.be&amp;fbclid=IwAR1XV6E6bD6t6H8zBFxQFWK8BQ3mHA9I6amnCwdkvo2sUj4tRD8a3HQ</a>	FHWA	1:12	What rumble strips are and how they keep you safe		Generic	Rumble Strips
Work Zone Safety is Your Responsibility Too	1	<a href="https://www.youtube.com/watch?v=xnPa9uEXSGU">https://www.youtube.com/watch?v=xnPa9uEXSGU</a>	National Asphalt Pavement Assoc	1:50	Protecting worker's lives in a work zone and actions to take	says accident	Generic	Work Zones – How to navigate them
Vision Zero - Just One Reason - Dad	1	<a href="https://www.youtube.com/watch?v=5XUzQEWQYM">https://www.youtube.com/watch?v=5XUzQEWQYM</a>	Montana DOT	0:30	What's your one reason to use a seatbelt? Shows a dad driving with his young daughter and staying safe for the sake of her is the only reason he needs to buckle up.	Captions need work before using without sound.	MT specific	Seatbelt Use
What is a roundabout?	1	<a href="https://www.youtube.com/watch?v=CgtJy4b4WQs">https://www.youtube.com/watch?v=CgtJy4b4WQs</a>	Montana DOT	1:02	What a roundabout is, why it's safer, and how to use.	Captions need work before using without sound.	MT specific	Roundabouts
Sober Friend	1	<a href="https://www.youtube.com/watch?v=lnYtY9yfyvc&amp;feature=youtu.be">https://www.youtube.com/watch?v=lnYtY9yfyvc&amp;feature=youtu.be</a>	plan2live.mt.gov	0:30	If you plan to drink, make sure you have a sober friend to drive you home. Used a horse to be the "sober driver".		MT specific	Impaired driving (drug, drunk, etc)
"Share the Road" PSA	2	<a href="https://www.youtube.com/watch?v=MUL8l9_65lc">https://www.youtube.com/watch?v=MUL8l9_65lc</a>	Michigan DOT	0:29	Treat cyclists like cars. Same roads, same rights, same rules. Give them space.	Logo at beginning.	Generic	Sharing the Road - Nonmotorized Users
Judging a Motorcycle's Distance	2	Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	because they are small it is hard to judge how far away a motorcycle is		Generic	Motorcycles
Emoji 30	2	<a href="https://www.youtube.com/watch?v=iKEedrQsd_Q">https://www.youtube.com/watch?v=iKEedrQsd_Q</a>	NHTSA	0:30	Shows the emotional aftermath of texting and driving crashes.		Generic	Distracted Driving
Don't Be This Driver	2	<a href="https://www.youtube.com/watch?v=kmyFYYGzHNw">https://www.youtube.com/watch?v=kmyFYYGzHNw</a>	NHTSA	0:34	Stop means stop at a school bus. Children's lives depend on it. Children's greatest risk isn't riding on the bus, but approaching or leaving one.		Generic	School Buses
Embrace Life- Always Wear Your Seatbelt	2	<a href="https://www.youtube.com/watch?v=eh-8PBx7isoM&amp;feature=youtu.be">https://www.youtube.com/watch?v=eh-8PBx7isoM&amp;feature=youtu.be</a>	Sussex Safer Roads	1:28	Shows a family serving as the seat belt for a loved one in a crash.		Generic	Seatbelt Use
I'm Not Driving - DUI PSA	2	<a href="https://www.youtube.com/watch?v=iGWPpTOPeA">https://www.youtube.com/watch?v=iGWPpTOPeA</a>	WA Traffic Safety Commission	0:30	Can't drive if you're drinking, high, or on certain medications	Captions need work before using without sound. Talks about alcohol, marijuana, and prescription meds. Logo at end	Generic	Impaired driving (drug, drunk, etc)
Truck Smart: Avoiding Blind Spots	2	<a href="https://www.youtube.com/watch?v=IWMb6dx3Zk8&amp;feature=youtu.be">https://www.youtube.com/watch?v=IWMb6dx3Zk8&amp;feature=youtu.be</a>	Zero Fatalities	0:40	Semis have four blind spots and we need to be aware of them all, especially the right	Captions need work before using without sound.	Generic	
Snow Rumble	2	<a href="https://www.youtube.com/watch?v=8myK1ablWaY&amp;list=PLxseor6I1x1FLsiQwz26AU3ZDq-lhBx7m&amp;index=2">https://www.youtube.com/watch?v=8myK1ablWaY&amp;list=PLxseor6I1x1FLsiQwz26AU3ZDq-lhBx7m&amp;index=2</a>	Montana DOT	0:30	Rumble strips are important all year round, especially the center line rumble strips in the winter. They will alert you when you are	Captions need work before using.	MT specific	Rumble strips
Motorists in Roundabout	2	<a href="https://www.youtube.com/watch?v=ncIOQ82Y2_s&amp;feature=youtu.be">https://www.youtube.com/watch?v=ncIOQ82Y2_s&amp;feature=youtu.be</a>	Montana DOT	1:10	How to properly navigate a roundabout as a motorist	Captions need work before using.	MT specific	Roundabouts
Eye Contact Saves Lives - Animation	3	<a href="https://www.youtube.com/watch?v=ZCQVrSNH3Nc">https://www.youtube.com/watch?v=ZCQVrSNH3Nc</a>	Colorado DOT	0:15	Always make eye contact as you're crossing the street as a pedestrian with oncoming	logo at end	Generic	Sharing the Road - Nonmotorized Users
Our Family Protecting Yours	3	<a href="https://www.youtube.com/watch?v=QXU8A0a77Q">https://www.youtube.com/watch?v=QXU8A0a77Q</a>	Iowa DOT	0:30	winter driving tips	great video. Logo at end	Generic	Winter Driving
Safe Around Semi	3	<a href="https://www.youtube.com/watch?v=9kQWC3m3s5g">https://www.youtube.com/watch?v=9kQWC3m3s5g</a>	Iowa DOT	1:16	what not to do near semis	great tips	Generic	Other

Video Title	Storyboard #	Link	Source	Length	What is discussed?	Notes	Audience	Topic Category
Feel Different	3	<a href="https://www.youtube.com/watch?v=XfaJsPXy8CQ">https://www.youtube.com/watch?v=XfaJsPXy8CQ</a>	NHTSA	0:30	Impaired driver almost hits a pedestrian due to impaired driving. If you feel different, you drive different.	Would be better with sound, but you get the point. Also shows marijuana use and not just alcohol.	Generic	Impaired driving (drug, drunk, etc)
Buckle Up What You Love - Click it or Ticket	3	<a href="https://www.youtube.com/watch?v=NJeGPAhYHDk">https://www.youtube.com/watch?v=NJeGPAhYHDk</a>	NHTSA	0:30	Funny catchy tune about buckling everything your love (food, plants, stuffed animals, etc.) so why not buckle up yourself?	Better with sound because it is a song.	Generic	Seatbelt Use
What Kind Of Driver are you Raising	3	<a href="https://www.youtube.com/watch?v=ooGQoDfPAY">https://www.youtube.com/watch?v=ooGQoDfPAY</a>	Transport Accident Commission Victoria	1:00	Kid in the back seat is learning all the bad driving habits of his dad up front.	No talking so no captions needed.	Generic	
Flashing Yellow Light	3	<a href="https://www.youtube.com/watch?v=GCbdZedJCWk">https://www.youtube.com/watch?v=GCbdZedJCWk</a>	Montana DOT	1:00	Explains how flashing yellow arrows work. Clear and catchy.	Captions need work before using without sound.	MT specific	Flashing yellow arrows
Stay Safe in Nightwork Zones	3	<a href="https://www.youtube.com/watch?v=pb5XEHM_pM">https://www.youtube.com/watch?v=pb5XEHM_pM</a>	Montana DOT	1:05	Several headlines about construction workers being struck, killed by motorists in zones at night. Crews can be out any time of the day, so be aware and be cautious.	Captions need work before using without sound.	MT specific	Work Zones – How to navigate them
Slow Down for the Curve	4	<a href="https://www.youtube.com/watch?v=V5fKGMrjcl4">https://www.youtube.com/watch?v=V5fKGMrjcl4</a>	Clackamas County	0:48	Woman with full cart at grocery store going around a corner way too fast and her cart ends up tipping over. You wouldn't do that in a grocery store, so don't do it on the road.	Logo at beginning and end. No captions but worth it to create them as this is a top priority of the project panel.	Generic	Speeding
Railroad Safety - Rural Crossing	4	<a href="https://www.youtube.com/watch?v=vtGHNyHDQW8">https://www.youtube.com/watch?v=vtGHNyHDQW8</a>	Colorado DOT	0:19	Even if there are no crossing arms and no flashing lights, doesn't mean there's no train	logo at end	Generic	Railroad crossings
Together We Can End Impaired Driving	4	<a href="https://www.youtube.com/watch?v=iJMH8Q39YKk">https://www.youtube.com/watch?v=iJMH8Q39YKk</a>	Foundation for Advancing Alcohol Responsibility	1:01	Imagine a world where we can get home safely, tuck our kids into bed every night, pursue our dreams without having to worry about other people ruining it by driving impaired.	Great video. Definitely use...shows all sides of impaired driving.	Generic	Impaired driving (drug, drunk, etc)
Use Caution Around Slow Moving Vehicles	4	<a href="https://www.youtube.com/watch?v=MSG_zEF1uXE">https://www.youtube.com/watch?v=MSG_zEF1uXE</a>	Iowa DOT	0:30	how to drive near a SMW	logo at end.	Generic	
Slow Down, Move Over PSA	4	<a href="https://www.youtube.com/watch?v=74SeAZv82wF&amp;feature=youtu.be">https://www.youtube.com/watch?v=74SeAZv82wF&amp;feature=youtu.be</a>	New York State DMV	0:32	Cops, paramedics, construction workers telling the viewer in a firm voice to slow down and move over when they are present. They are trying to do their jobs and people who don't slow down and move over make it unsafe for them.	Logo at end	Generic	Emergency Vehicles – What to do when they are present, Move Over laws
The Right Seat – If You Love Them Enough – Play Place	4	<a href="https://www.youtube.com/watch?v=I6Ku5_TSYdU">https://www.youtube.com/watch?v=I6Ku5_TSYdU</a>	NHTSA	0:30	right child seat		Generic	Seatbelt Use
Be Seen - Pedestrian Safety	4	<a href="https://www.youtube.com/watch?time_continue=40&amp;v=xDIP5OonQs&amp;feature=emb_logo">https://www.youtube.com/watch?time_continue=40&amp;v=xDIP5OonQs&amp;feature=emb_logo</a>	WA Traffic Safety Commission	1:54	There are a lot of pedestrians in native communities and there is a disproportional amount of pedestrians deaths in native communities.	logo at end. Captions need work before using.	Generic	Tribal specific
There's No One Someone Won't Miss	4	<a href="https://www.youtube.com/watch?v=k2tQye9DKdQ">https://www.youtube.com/watch?v=k2tQye9DKdQ</a>	Transport Accident Commission Victoria	1:00	Asks a man what an acceptable number of people to die on the roadways in a given year is (given 200 people died last year). He said 70. Then 70 of his family members walked out from around the corner. He quickly changes his number to zero. Zero people should be dying on the roadways.	Logo at end and in bottom right corner. Captions are overtop the words in the video.	Other state specific	
Funeral		<a href="https://www.youtube.com/watch?time_continue=25&amp;v=enqm2wPv1U&amp;feature=emb_logo">https://www.youtube.com/watch?time_continue=25&amp;v=enqm2wPv1U&amp;feature=emb_logo</a>	Bureau of Highway Safety	0:30	Shows the scene of a funeral. Losing a loved one always hurts, but it's especially painful when they are lost due to distracted driving... it's pain that could've been avoided	Logo at end. Captions need work before using.	Generic	Distracted Driving
Share the Road Safety Video		<a href="https://www.youtube.com/watch?v=5yRVJtdJ7U&amp;feature=youtu.be">https://www.youtube.com/watch?v=5yRVJtdJ7U&amp;feature=youtu.be</a>	CAA South Central Ontario	0:30	Bikes need to stop a behind semi trucks otherwise the driver can't see them.	Captions need work before using without sound. Logos at end.	Generic	Sharing the Road - Nonmotorized Users
School Bus Safety PSA Video 1		<a href="https://www.youtube.com/watch?v=Z2KZunoQd4A">https://www.youtube.com/watch?v=Z2KZunoQd4A</a>	Child Safety Network	0:30	Don't ever pass a stopped school bus with it's flashing red lights. Kids' lives depend on it.	Captions need work before using without sound.	Generic	School Busses
School Bus Safety Video 4		<a href="https://www.youtube.com/watch?v=Ybrzi-UJieE">https://www.youtube.com/watch?v=Ybrzi-UJieE</a>	Child Safety Network	0:30	Don't break the law, don't drive distracted, don't take chances. Always stop for school busses. Children's lives depend on it.	Captions need work before using without sound.	Generic	School Busses



Video Title	Storyboard #	Link	Source	Length	What is discussed?	Notes	Audience	Topic Category
What Will YOU lose? - Andrea		<a href="https://www.youtube.com/watch?v=ygKldJITQ">https://www.youtube.com/watch?v=ygKldJITQ</a>	Colorado DOT	0:15	Interviews a woman who's in prison because she killed someone because she was drinking and driving	logo at end. Captions need work before using.	Generic	Impaired driving (drug, drunk, etc)
Railroad Safety - Rural Signs		<a href="https://www.youtube.com/watch?v=6xjdBZmWuWg">https://www.youtube.com/watch?v=6xjdBZmWuWg</a>	Colorado DOT	0:20	Shows the different railroad crossing signs. When you see these, always be looking for trains	logo at end	Generic	Railroad crossings
Crash Survivor		<a href="https://www.youtube.com/watch?v=vA2kdScSoZM">https://www.youtube.com/watch?v=vA2kdScSoZM</a>	Colorado DOT	1:11	Interviews a couple who was in a car crash, and it wasn't there fault. It can happen to anybody. They wouldn't be alive if they hadn't been wearing their seatbelts	logo at end. Captions need work before using.	Generic	Seatbelt Use
Distracted Driving: Shame		<a href="https://www.youtube.com/watch?v=npiBScdhurg">https://www.youtube.com/watch?v=npiBScdhurg</a>	Connecticut DOT	0:15	Interviewing people about they're phone use while driving. There is no shame in what they're saying and that's the problem	Logo at end. Captions need work before using.	Generic	Distracted Driving
Distracted Driving Pull Over Here		<a href="https://www.youtube.com/watch?time_continue=9&amp;v=eIQKvZcOFA&amp;feature=emb_logo">https://www.youtube.com/watch?time_continue=9&amp;v=eIQKvZcOFA&amp;feature=emb_logo</a>	Connecticut DOT	0:30	It's great that you're pulling over to send that text or take that call, but make sure you're pulling over in a safe place... like a parking lot or rest area. Don't pull over on the side of a very busy highway.	Logo at end. Captions need work before using.	Generic	Distracted Driving
Work Zone Safety		<a href="https://www.youtube.com/watch?time_continue=30&amp;v=2bWQdFoljA&amp;feature=emb_logo">https://www.youtube.com/watch?time_continue=30&amp;v=2bWQdFoljA&amp;feature=emb_logo</a>	Connecticut DOT	0:30	In work zones, there are more than trucks behind the cones. There are people who have families. Slow down.	logo at end	Generic	Work Zones – How to navigate them
Innovation Spotlight: Rural Roadway Departures		<a href="https://www.youtube.com/watch?v=lcQYVgz3W9c&amp;feature=youtu.be">https://www.youtube.com/watch?v=lcQYVgz3W9c&amp;feature=youtu.be</a>	FHWA	1:55	Discusses the statistics of roadway departures on rural roads and what is being done to prevent these sort of crashes.	this may be too much for practitioners and not resonate with the public	Generic	Road side/clear zone
Distracted Driving PSA		<a href="https://www.youtube.com/watch?time_continue=25&amp;v=VxtOIS2xeaw&amp;feature=emb_logo">https://www.youtube.com/watch?time_continue=25&amp;v=VxtOIS2xeaw&amp;feature=emb_logo</a>	Governor's Traffic Safety Committee - NY	0:30	Texting and driving is "crazy." Spoken by race car drivers who are typically the ones being called "crazy." When they're driving, they're 100% focused on what they're doing, as should any regular person driving	Logo at end. Captions need work before using. Multiple race car drivers, not one specific celebrity.	Generic	Distracted Driving
Drugged Driving PSA		<a href="https://www.youtube.com/watch?time_continue=25&amp;v=5SjSEpWl_2c&amp;feature=emb_logo">https://www.youtube.com/watch?time_continue=25&amp;v=5SjSEpWl_2c&amp;feature=emb_logo</a>	Governor's Traffic Safety Committee - NY	0:30	Alcohol and other drugs are dangerous on their own, but when you add a vehicle to the mix, it becomes a whole lot more dangerous	logo at end	Generic	Impaired driving (drug, drunk, etc)
How roundabouts work		<a href="https://www.youtube.com/watch?v=1DJDiaa25Co&amp;feature=youtu.be">https://www.youtube.com/watch?v=1DJDiaa25Co&amp;feature=youtu.be</a>	IIHS	1:59	What roundabouts are and step by step how to use them. How right angle crashes are greatly reduced by roundabouts.		Generic	Roundabouts
Slow Moving Vehicle Bumper		<a href="https://www.youtube.com/watch?v=xYYQLTckULw">https://www.youtube.com/watch?v=xYYQLTckULw</a>	Iowa DOT	0:06	how to drive near SMV	logo at end	Generic	
Don't Crowd the Plow		<a href="https://www.youtube.com/watch?v=y9e9ecrHCWU&amp;feature=youtu.be">https://www.youtube.com/watch?v=y9e9ecrHCWU&amp;feature=youtu.be</a>	Kansas DOT	1:49	Animated snow plow giving safety tips when it comes to plows and why it is dangerous to pass. Be patient and then they can do their job best.	Captions need work before using without sound. Check to make sure MDT uses salt, sand, salt bring, wing plows, and tow plows before using. Logo in bottom right entire time.	Generic	Snow Plows
Minnesota Motorcycle Safety Center: Don't Drink and Ride		<a href="https://www.youtube.com/watch?v=nDPEqKDRTel">https://www.youtube.com/watch?v=nDPEqKDRTel</a>	MN DPS	0:30	Talks about how you can ruin your precious, new, expensive bike in just a couple of seconds if you drink and ride	logo and mention on MN DPS at very end. Captions need work before using.	Generic	Motorcycles
Camryn "Cici" Callaway died Feb. 22, 2018		<a href="https://www.youtube.com/watch?v=M1NYHTYbWZe&amp;list=PL337F74DED367FDE7">https://www.youtube.com/watch?v=M1NYHTYbWZe&amp;list=PL337F74DED367FDE7</a>	National Safety Council	1:22	A mother talking about how she lost her 17 year old daughter because she was texting and driving		Generic	Distracted Driving
Distracted Driving Awareness Month		<a href="https://www.youtube.com/watch?v=MkYevmri1LU&amp;list=PL337F74DED367FDE7&amp;index=2">https://www.youtube.com/watch?v=MkYevmri1LU&amp;list=PL337F74DED367FDE7&amp;index=2</a>	National Safety Council	1:59	A woman who was hit by a 40 mph car talks about her experience. She was hit by somebody texting and driving.		Generic	Distracted Driving
Watch for Intersection Obstructions (Motorcycles)		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	watch for motorcycles at intersections with obstructions		Generic	Motorcycles
No Money		<a href="https://www.youtube.com/watch?time_continue=1&amp;v=jP5ngQQtV0&amp;feature=emb_title">https://www.youtube.com/watch?time_continue=1&amp;v=jP5ngQQtV0&amp;feature=emb_title</a>	NHTSA	0:15	DUI's are expensive. Shows a guy sad about how much money it cost him to get a DUI and him imagining where he would be if he didn't lose that money.		Generic	Impaired driving (drug, drunk, etc)

Video Title	Storyboard #	Link	Source	Length	What is discussed?	Notes	Audience	Topic Category
Motorcycle Fatalities at Intersections		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	many motorcycle fatalities happen at intersections. Watch for motorcycles.		Generic	Motorcycles
Adjust Your Mirrors Properly (Motorcycles)		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	adjust your mirrors properly to help you see motorcycles		Generic	Motorcycles
Know Your Blind Spots (Motorcycles)		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	know your blind spots and look for motorcycles		Generic	Motorcycles
No Lights When Braking (Motorcycles)		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	motorcycles don't always use their brakes to slow down.		Generic	Motorcycles
Proper Braking Cushion (Motorcycles)		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	motorcycles stop quickly so leave room between them and you		Generic	Motorcycles
Visual Conspicuity (Motorcycles)		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	motorcycles blend in with their surroundings		Generic	Motorcycles
Weaving for a Purpose (Motorcycles)		Scroll down to web videos... <a href="https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles">https://www.trafficsafetymarketing.gov/get-materials/motorcycle-safety/motorist-awareness-motorcycles</a>	NHTSA	0:15	motorcycles weave to stay out of blind spots		Generic	Motorcycles
No Big Deal		<a href="https://www.youtube.com/watch?v=4B-CdnoM6UMM">https://www.youtube.com/watch?v=4B-CdnoM6UMM</a>	NHTSA	0:30	You know the risks when you decide to drive drunk, but you are wrong when you say "it's no big deal." Shows an intense crash scene caused by a drunk driver.	Scare tactic	Generic	Impaired driving (drug, drunk, etc)
Manifesto - Texting While Driving		<a href="https://www.youtube.com/watch?v=Q8-MQV40pOtU">https://www.youtube.com/watch?v=Q8-MQV40pOtU</a>	NHTSA	0:30	Car filled with teenagers, driver is texting and gets into a serious crash.	Scare tactic but addresses why enforcement is important.	Generic	Distracted Driving
Tyler's Story		<a href="https://www.youtube.com/watch?v=IDb-yIQ6lwX4">https://www.youtube.com/watch?v=IDb-yIQ6lwX4</a>	NHTSA	0:30	Talks about a young man named Tyler who had so much life ahead of him. He decided to video record himself driving home one night, which ended up ending his life.	Logos at the end	Generic	Distracted Driving
No Good Excuse		<a href="https://www.youtube.com/watch?v=stzr-WDJ66MQ">https://www.youtube.com/watch?v=stzr-WDJ66MQ</a>	NHTSA	0:30	People listing the reasons why they don't wear a seatbelt... But there's no good excuse. Seatbelts are 100% necessary.	Scare tactic but impactful.	Generic	Seatbelt Use
You Know It's True		<a href="https://www.youtube.com/watch?v=JzF-xNYO4Msw&amp;list=PL2GIXO1j4M73GB1HJYSR0FDIMIT9wPtcc&amp;index=1">https://www.youtube.com/watch?v=JzF-xNYO4Msw&amp;list=PL2GIXO1j4M73GB1HJYSR0FDIMIT9wPtcc&amp;index=1</a>	NHTSA	0:30	Voice over of woman calling 911 after seeing a vehicle get thru train crossing but didn't make it. Shows footage leading up to the crash.		Generic	Railroad crossings
Spotted Driving High		<a href="https://www.youtube.com/watch?v=dM-RVvdNdYS8">https://www.youtube.com/watch?v=dM-RVvdNdYS8</a>	NHTSA	0:30	Driving high		Generic	Impaired driving (drug, drunk, etc)
Famous Last Words		<a href="https://www.youtube.com/watch?v=L6u-epXw9gZA">https://www.youtube.com/watch?v=L6u-epXw9gZA</a>	NHTSA	0:31	Young driver killed in a car crash due to texting and driving. Shows the scene of her funeral.	Scare tactic	Generic	Distracted Driving
July 4th Drunk Driving Uncle Sam Busted		<a href="https://www.youtube.com/watch?v=ud-H433R8mZo&amp;list=PL2GIXO1j4M73GB1HJYSR0FDIMIT9wPtcc&amp;index=12">https://www.youtube.com/watch?v=ud-H433R8mZo&amp;list=PL2GIXO1j4M73GB1HJYSR0FDIMIT9wPtcc&amp;index=12</a>	NHTSA	0:35	Shows visibly drunk man getting into his car during 4th of July, and a cop shows up before he can even start driving. The cops will see you before you see them.	July 4th specific	Generic	Impaired driving (drug, drunk, etc)

Video Title	Storyboard #	Link	Source	Length	What is discussed?	Notes	Audience	Topic Category
Find the Blue and White ENS Sign PSA		<a href="https://www.youtube.com/watch?time_continue=29&amp;v=e_aolard4GIA&amp;feature=emb_logo">https://www.youtube.com/watch?time_continue=29&amp;v=e_aolard4GIA&amp;feature=emb_logo</a>	Operation Lifesaver	0:30	What to do if you are stuck at a railroad crossing.	Captions need work before using.	Generic	Railroad crossings
I Should Have Read the Label		<a href="https://www.facebook.com/watch/?v=1563829233662606">https://www.facebook.com/watch/?v=1563829233662606</a>	Orange County District Attorney Office	1:34	Shows clips from the lives of two different people. One of which is very distracted in general and the other who is not. Both take	Logo at end	Generic	Impaired driving (drug, drunk, etc)
Move It PSA		<a href="https://www.youtube.com/watch?v=VQXYUys1OBQ">https://www.youtube.com/watch?v=VQXYUys1OBQ</a>	Oregon DOT	0:30	If you're in a non-life threatening crash, move over and don't hold up traffic behind you! It significantly increases danger if you don't, could result in a more serious crash.	Logos at closing	Generic	Traffic Incident Management
Transportation Safety ODOT - What it Takes		<a href="https://www.youtube.com/watch?v=6rhbZDB5CE">https://www.youtube.com/watch?v=6rhbZDB5CE</a>	Oregon DOT	0:30	Why you need to use a booster seat for your children until they are 4' 9". Their safety is in your hands.	Logos at closing. Captions in foreign language, but good message.	Generic	Seatbelt Use
Motorcycle Safety PSA - Pef's Mom		<a href="https://www.youtube.com/watch?v=njS2oTm7RwM">https://www.youtube.com/watch?v=njS2oTm7RwM</a>	WA Licensing	1:39	Interview with a mom whose son was killed on a motorcycle due to a car turning out in front of him	Logo at end.	Generic	Motorcycles
Officer Hides Motorcycle Behind Pen		<a href="https://www.youtube.com/watch?v=3_kp14f4MXI&amp;feature=youtu.be&amp;fbclid=IwAR16ABWRZmaH-">https://www.youtube.com/watch?v=3_kp14f4MXI&amp;feature=youtu.be&amp;fbclid=IwAR16ABWRZmaH-</a>	WKRK	0:20	Police officer speaking to camera while holding up a pen that is blocking a motorcycle. Something so small as that can	Police office mentions where he is from.	Generic	Distracted Driving
Making a Left Turn from a Roundabout		<a href="https://www.youtube.com/watch?v=F1bc7R4eXTs&amp;feature=youtu.be">https://www.youtube.com/watch?v=F1bc7R4eXTs&amp;feature=youtu.be</a>	Montana DOT	0:28	Shows animated car maneuvering a left turn in a roundabout.	No sound	MT specific	Roundabouts
Making a Right Turn from a Roundabout		<a href="https://www.youtube.com/watch?v=GU3o_oDSU_0&amp;feature=youtu.be">https://www.youtube.com/watch?v=GU3o_oDSU_0&amp;feature=youtu.be</a>	Montana DOT	0:28	Shows animated car maneuvering a right turn in a roundabout.	No sound	MT specific	Roundabouts
Going Straight in a Roundabout		<a href="https://www.youtube.com/watch?v=aAZyEDLrmMo&amp;feature=youtu.be">https://www.youtube.com/watch?v=aAZyEDLrmMo&amp;feature=youtu.be</a>	Montana DOT	0:28	Shows animated car going straight through a roundabout.	No sound	MT specific	Roundabouts
Buckle Up		<a href="https://www.youtube.com/watch?v=e_o1A883VUo">https://www.youtube.com/watch?v=e_o1A883VUo</a>	Montana DOT	0:30	Guy talking to his kid about why he uses his seatbelt. Kid says he uses his seatbelt	Captions need work before using without sound.	MT specific	Seatbelt Use
Let's Rumble		<a href="https://www.youtube.com/watch?v=7Vctik5ZpK4">https://www.youtube.com/watch?v=7Vctik5ZpK4</a>	Montana DOT	0:30	Why centerline rumble strips are becoming more popular in MT. They're making the roads	Captions need work before using without sound.	MT specific	Rumble Strips
Buckle Up MT - Holidays		<a href="https://www.youtube.com/watch?v=ebNzh1bZfxY&amp;list=PLxseor611x1EalJMR87Mq6YC8frUaLLB">https://www.youtube.com/watch?v=ebNzh1bZfxY&amp;list=PLxseor611x1EalJMR87Mq6YC8frUaLLB</a>	Montana DOT	0:30	Woman talking about a scary crash her and her family was in. Luckily they were all wearing their seatbelts and are able to continue spending holidays with each other.	Captions need work before using.	MT specific	Seatbelt Use
A DUI Can Cost You		<a href="https://www.youtube.com/watch?v=SkS7wckOtM">https://www.youtube.com/watch?v=SkS7wckOtM</a>	Montana DOT	0:36	So many reasons to plan a sober ride. Getting a DUI can cost you your license, cost you lots of money, can put you in jail... There are better ways to spend your time.	Captions need work before using without sound.	MT specific	Impaired driving (drug, drunk, etc)
Emergency Vehicles in Roundabouts		<a href="https://www.youtube.com/watch?v=UEZE4Ljw_w&amp;feature=youtu.be">https://www.youtube.com/watch?v=UEZE4Ljw_w&amp;feature=youtu.be</a>	Montana DOT	0:40	What to do if an emergency vehicle approaches behind you in a roundabout	Captions need work before using.	MT specific	Roundabouts
Truck Apron		<a href="https://www.youtube.com/watch?v=SaZs3MnHKM">https://www.youtube.com/watch?v=SaZs3MnHKM</a>	Montana DOT	0:54	Explains what a truck apron is and how getting through a roundabout as a large	Captions need work before using.	MT specific	Roundabouts
Why Roundabouts		<a href="https://www.youtube.com/watch?v=pFVSJZps8h0&amp;feature=youtu.be">https://www.youtube.com/watch?v=pFVSJZps8h0&amp;feature=youtu.be</a>	Montana DOT	1:34	Statistics about roundabout safety and then the reasons behind roundabout safeness.		MT specific	Roundabouts
Trooper Inman		<a href="https://www.youtube.com/watch?v=UYWds56wmYw">https://www.youtube.com/watch?v=UYWds56wmYw</a>	Montana DOT	1:51	People in MT are skeptical about roundabouts because they aren't too common. But it's really easy to learn and	Captions need work before using.	MT specific	Roundabouts

Video Title	Storyboard #	Link	Source	Length	What is discussed?	Notes	Audience	Topic Category
Flashing Yellow Left-Turn Arrows in Montana		<a href="https://www.youtube.com/watch?v=xliuNo-9t6eQ&amp;feature=youtu.be">https://www.youtube.com/watch?v=xliuNo-9t6eQ&amp;feature=youtu.be</a>	Montana DOT	1:53	Explains how flashing-yellow arrows work and why they are becoming more popular.	Captions need work before using without sound.	MT specific	Flashing yellow arrows
2019 MOAZ :30 - English		<a href="https://www.youtube.com/watch?v=Y34">https://www.youtube.com/watch?v=Y34</a>	Arizona DOT	0:29	If there are any flashing lights (emergency, utilities, construction) move over	logos at end. Captions need work before using.	Other state specific	Emergency Vehicles – What to do when they
Go Safely		<a href="https://www.youtube.com/watch?v=FiR7DSzD_qs">https://www.youtube.com/watch?v=FiR7DSzD_qs</a>	California Office of Traffic Safety	0:30	We should be holding the wheel, not the phone	Great video but last part is specific to California...possibly cut with permission.	Other state specific	Distracted Driving
Crash, Not an Accident		<a href="https://www.youtube.com/watch?v=B_dqA9kIGJA">https://www.youtube.com/watch?v=B_dqA9kIGJA</a>	Michigan DOT	1:07	There's a difference between a "crash" and an "accident." Most of the time it's a crash because there usually is someone to blame.	last 10 seconds are specific to Michigan but fantastic message.	Other state specific	Distracted Driving



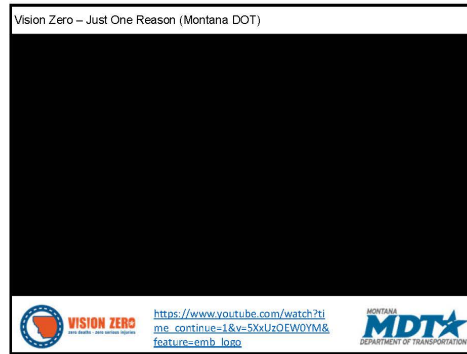
## Appendix E: Storyboard Drafts

### Storyboard #1

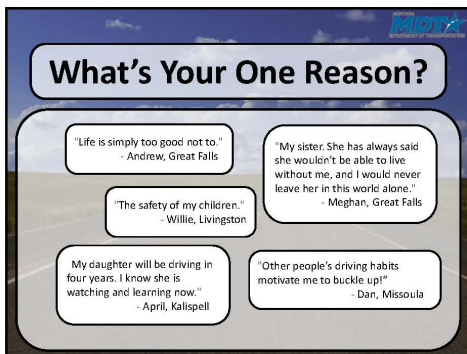
1/20/2021



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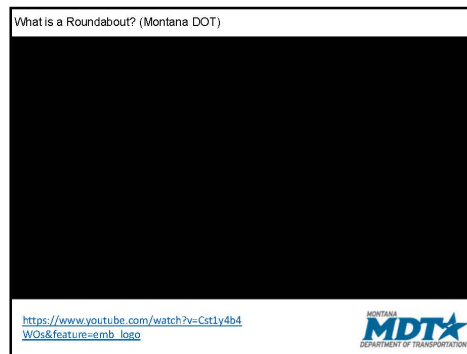
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1/20/2021

**Trivia Check-In!**

True or False, roundabouts can reduce crashes by 40?

a. True  
b. False

Modern roundabouts dramatically reduce crashes, making them a Proven Safety Countermeasure

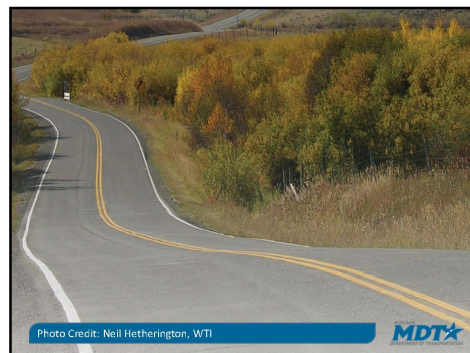
Source: [https://www.youtube.com/watch?v=Cd1Yd4W0s&feature=emb\\_logo](https://www.youtube.com/watch?v=Cd1Yd4W0s&feature=emb_logo)

7

MT Real ID Airport (Montana DOJ)

[https://www.youtube.com/watch?v=xcrRi\\_7YcUY&feature=emb\\_logo](https://www.youtube.com/watch?v=xcrRi_7YcUY&feature=emb_logo)

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Sober Friend (Montana DOT)

[https://www.youtube.com/watch?v=jnYY9wfyyc&feature=emb\\_logo](https://www.youtube.com/watch?v=jnYY9wfyyc&feature=emb_logo)

10

**WHAT WILL A DUI COST YOU?**

IT'S MORE THAN JUST A TRAFFIC FINE.  
If you drive impaired, expect to be arrested and taken to jail, then be prosecuted, and sentenced by a judge.

Source: <https://www.mdt.mt.gov/visionzero/docs/what-a-dui-will-cost-you-brochure.pdf>

11

Tips for Safe Winter Driving (AAA)

[https://www.youtube.com/watch?v=m5LkTKW3TDY&feature=emb\\_logo](https://www.youtube.com/watch?v=m5LkTKW3TDY&feature=emb_logo)

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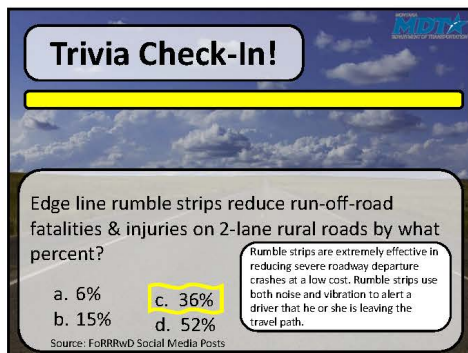
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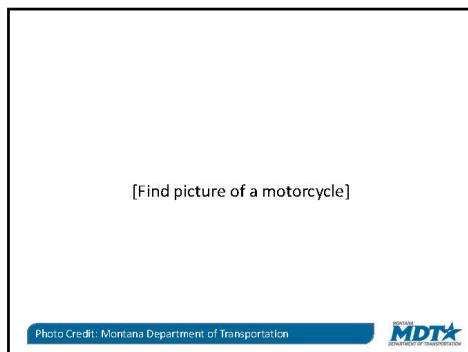
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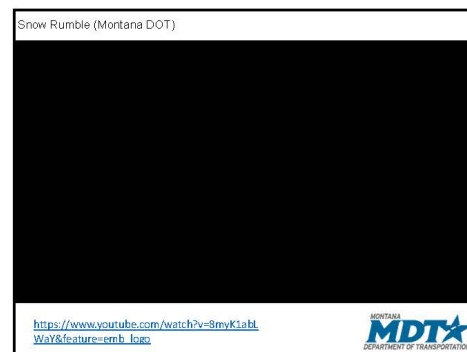
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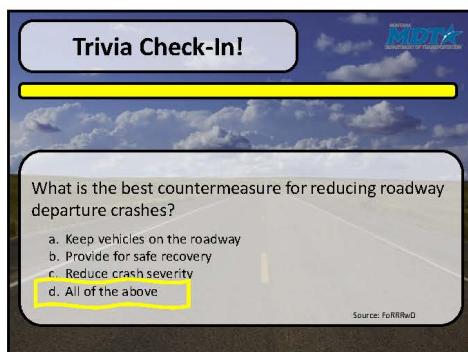
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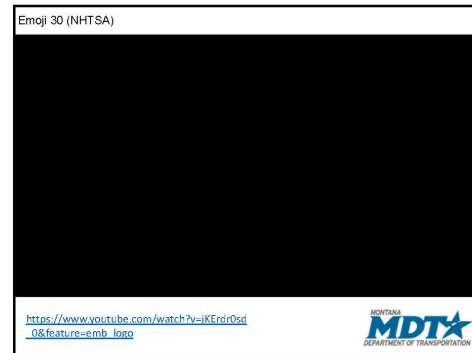
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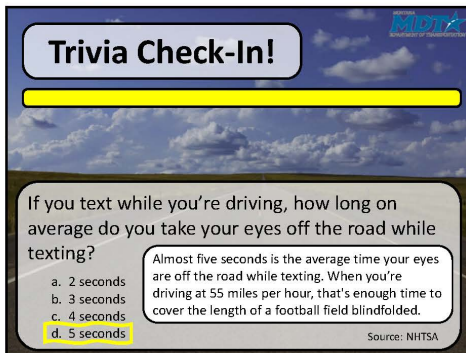
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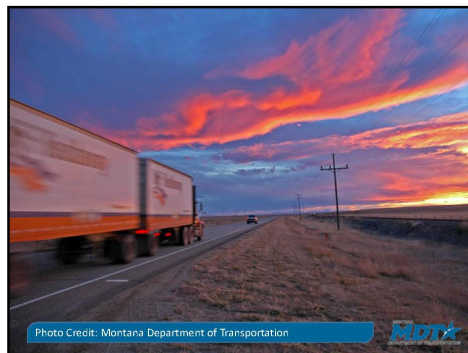
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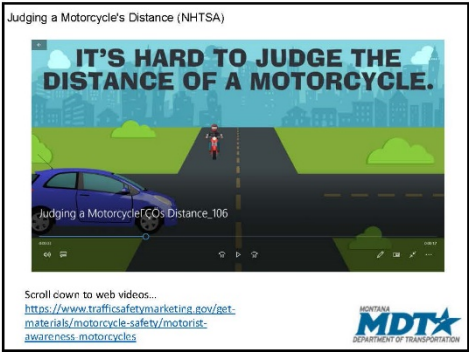
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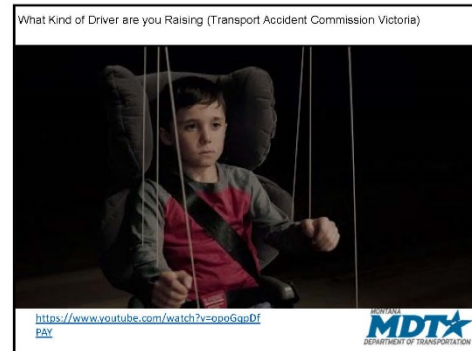
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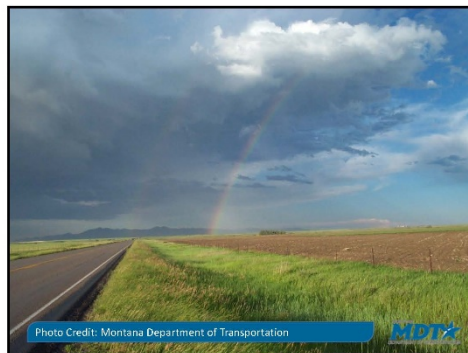
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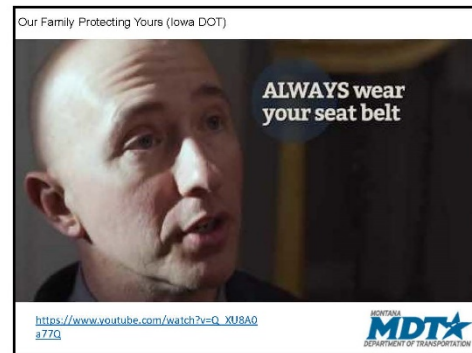
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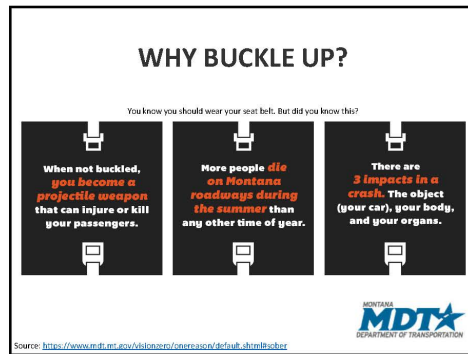
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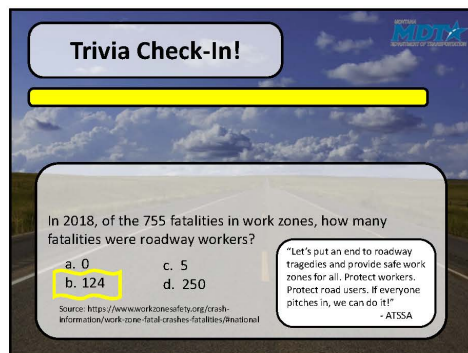
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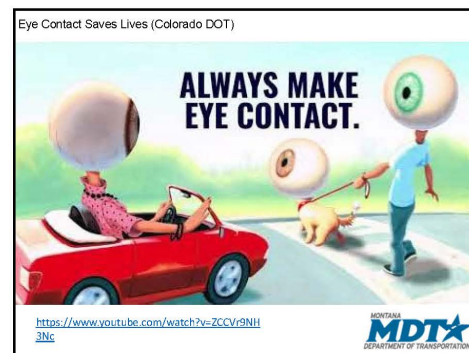
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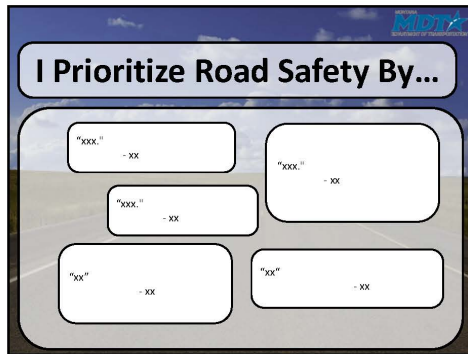
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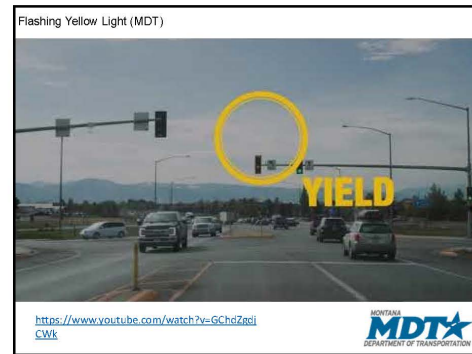
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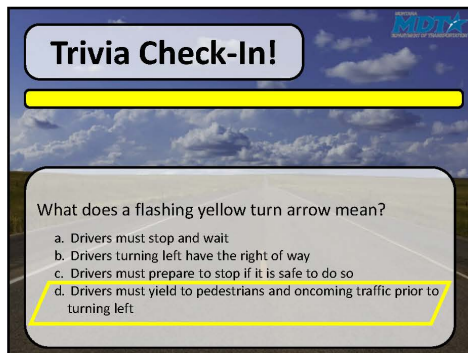
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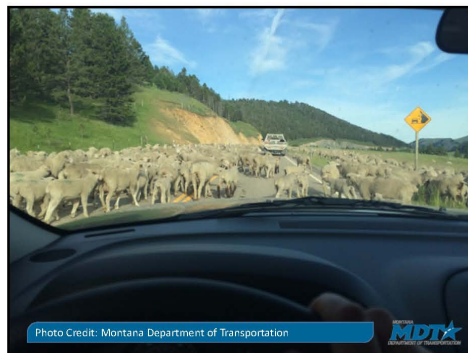
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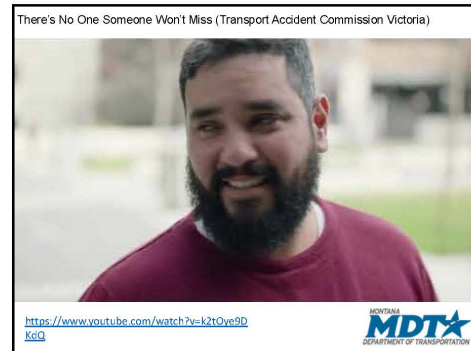
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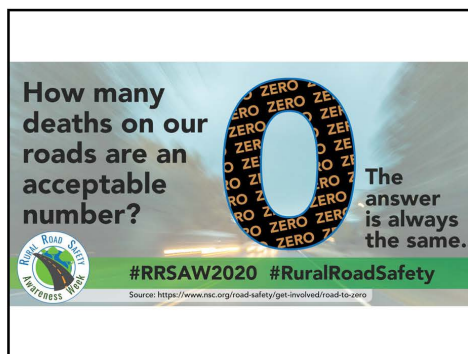
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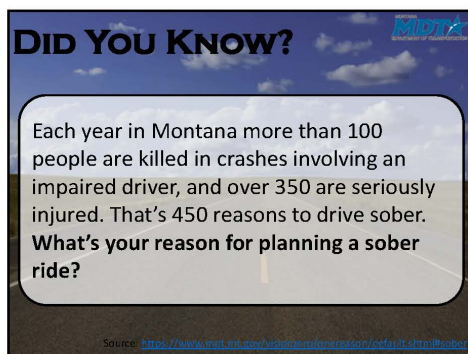
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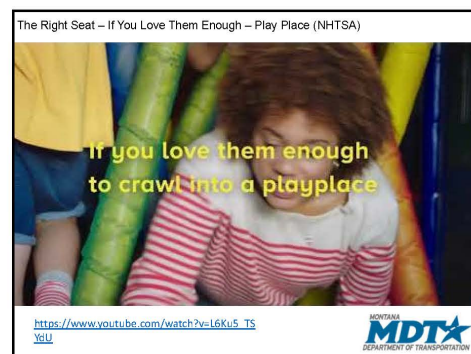
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**Trivia Check-In!**

According to NHTSA, what percentage of children aged 4 to 7 are prematurely moved to seat belts when they should be riding in booster seats?

a. 2 %    **c. 26%**  
b. 10%    d. 37%

To keep them safe, make sure to select the right car seat for your child's age and size.

Source: NHTSA

7

MT Real ID Airport (Montana DOI)

[https://www.youtube.com/watch?time\\_continue=1&v=xcrRi\\_7YcUY&feature=emb\\_logo](https://www.youtube.com/watch?time_continue=1&v=xcrRi_7YcUY&feature=emb_logo)

MVD

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Slow Down for the Curve (Clackamas County)

<https://www.youtube.com/watch?v=V5fKGMnqId>

MONTANA  
**MDT**  
DEPARTMENT OF TRANSPORTATION

10

**Trivia Check-In!**

What is the best countermeasure for reducing roadway departure crashes?

a. Keep vehicles on the roadway  
b. Provide for safe recovery  
c. Reduce crash severity  
**d. All of the above**

Source:  
[https://safety.fhwa.dot.gov/roadway\\_dept/](https://safety.fhwa.dot.gov/roadway_dept/)

11

Slow Down, Move Over (NY State DMV)

**MOVE OVER**

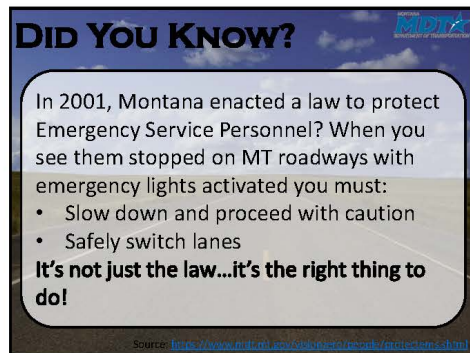
<https://www.youtube.com/watch?v=74SpA2v89wE&feature=youtu.be>

MONTANA  
**MDT**  
DEPARTMENT OF TRANSPORTATION

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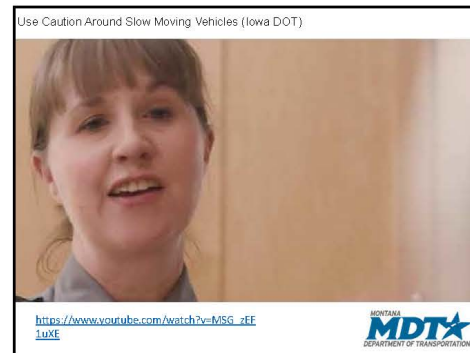
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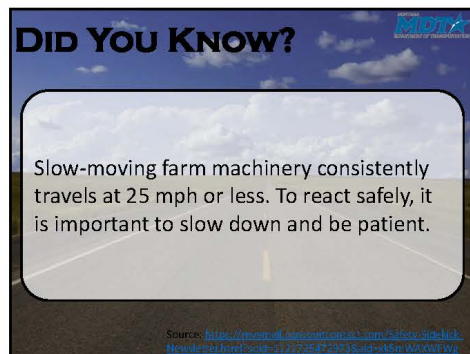
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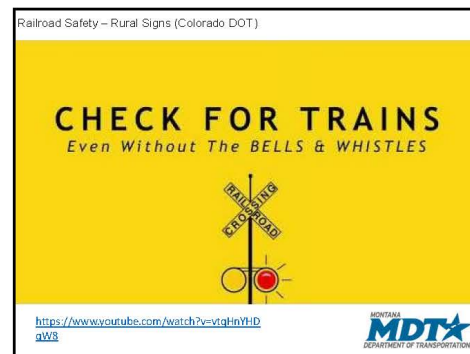
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